

10-6-20-5M

PRESENTED TO

S. J. A.

PER



The New York Academy of Medicine

By *Indiana State Med Assn.*



Digitized by the Internet Archive
in 2016

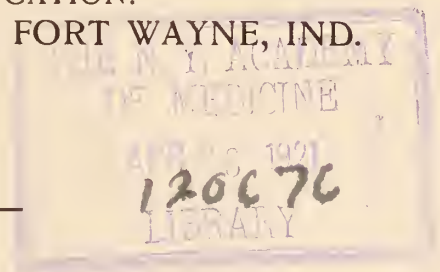
THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY
UNDER THE DIRECTION OF THE COUNCIL

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.
Editor and Manager

OFFICE OF PUBLICATION:
406 W. Berry Street - - FORT WAYNE, IND.



INDEX TO VOLUME XIII
JANUARY TO DECEMBER, INCLUSIVE, 1920

1895

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 1

FORT WAYNE, IND., JANUARY 15, 1920

PER YER, \$2.00
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES		PAGE	SOCIETY PROCEEDINGS		PAGE
The Value of the Roentgen Ray in the Diagnostic Work of the Internist—Illustrated. G. W. McCaskey, M.D., Fort Wayne, Ind.....		1	Indiana State Medical Association.....		36
Some Fractures of the Pelvis. Dr. Charles Haywood, Elkhart, Ind.....		8	Indianapolis Medical Society		37
The Relative Merits of Surgery, Radium and Roentgen Ray in Treatment of Uterine Fibroids. E. E. Padgett, M.D., Indianapolis		12	Floyd County		38
Conservative Surgery. O. O. Melton, M.D., Hammond, Ind.		14	Hamilton County		38
			Jasper-Newton County		38
			Johnson County		39
			Lake County		39
			Montgomery County		39
EDITORIALS			MISCELLANEOUS		
Public Health in Indiana		23	Deaths		28
Violation of the Medical Laws		23	News Notes and Personals.....		29
Record of Indiana Doctors in the Late War.....		24	The Truth About Medicines.....		39
Death of Sir William Osler.....		24	Book Reviews.....		Adv. p. xviii
Advertising and Its Returns.....		25			
Editorial Notes		26			

NEXT ANNUAL SESSION, SOUTH BEND, SEPT. 22, 23, 24, 1920.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103, ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

New (2nd) Edition

Just Ready

JOSLIN'S DIABETIC MANUAL

THE TREATMENT OF DIABETES is improving and this new edition incorporates all recent advances and gives a simplified presentation of the approved present-day treatment. Its great value is as a text-book for the patient. This little manual will secure the intelligent coöperation of your patients—this means valuable time saved for you.

Many new and valuable features make their appearance in this edition, notably the Test Diets, which make it simple for a doctor to get patients sugar-free without the necessity of (1) the patient stopping work, (2) entering the hospital or (3) buying scales. Illustrative cases are given ranging from very mild to very severe diabetes. Rules for Establishing Tolerance for Carbohydrate, Protein and Fat are given. A most important chapter is that on Acid Intoxication, Acidosis and Diabetic Coma with the Treatment of Severe Acid Intoxication; also the chapters on Diets and Diet Tables. An early diagnosis is as important as in Tuberculosis. The last chapter gives selected tests for Albumin—Sugar (the Benedict, Fehling, Fermentation, etc.)—for Urinary Acids—Diacetic Acid—Acetone—Ammonia—Nitrogen, etc. It includes the more recent knowledge on Determination of Blood Sugar, etc., and Examination of Expired Air for Carbon Dioxide.

The downward course of a patient can usually be promptly checked, but the education and coöperation of the patient is necessary. An ever-increasing number of physicians and clinics are seeing to it that *every patient has or gets a copy of this manual*. Prescribe it!

By E. P. JOSLIN, M.D., Assistant Professor of Medicine, Harvard Medical School; Lately Lieutenant-Colonel, M. C., U. S. Army, etc. 12mo, 191 pages, illustrated. Cloth, \$1.75, net.

706-710 Sansom Street
PHILADELPHIA

LEA & FEBIGER

2 West 45th Street
NEW YORK

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, South Bend, September 22, 23 and 24, 1920

OFFICERS AND COMMITTEES FOR 1920

President	CHARLES H. McCULLY, Logansport
1st Vice President	BUDD VAN SWERINGEN, Fort Wayne
2d Vice President.....	SAMUEL HOLLIS, Hartford City, Ind.
3d Vice President.....	CHARLES STOLTZ, South Bend
Secretary-Treasurer.....	CHAS. N. COMBS, Terre Haute
Executive Secretary	FREDERICK E. SCHORTEMEIER
Acting Executive Secretary.....	F. E. RASCHIG, 314 Hume-Mansur Bldg., Indianapolis

SECTION OFFICERS

Surgical Section—Chairman, James Y. Welborn, Evansville; Vice Chairman, M. R. Combs, Terre Haute; Secretary, H. O. Shafer, Rochester.

Medical Section—Chairman, Charles P. Emerson, Indianapolis; Vice Chairman, B. S. Hunt, Winchester; Secretary, Jane Ketcham, Indianapolis.

Eye, Ear, Nose and Throat Section—Chairman, John R. Newcomb, Indianapolis; Secretary, E. M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1920), Joseph Rilus Eastman, Indianapolis. Alternate, Miles F. Porter, Fort Wayne.

For two years (term expires December 31, 1921), Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington.

COUNCILORS

Chairman, G. W. H. Kemper, Muncie.

DISTRICT	TERM EXPIRES	DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920	7th—T. B. Eastman, Indianapolis.....	December 31, 1920
2d—J. B. Maple, Sullivan	December 31, 1921	8th—G. W. H. Kemper, Muncie.....	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922	9th—William R. Moffitt, Lafayette.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920	10th—E. M. Shanklin, Hammond.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921	11th—G. G. Eckhart, Marion.....	December 31, 1921
6th—T. S. Spilman, Connersville.....	December 31, 1922	12th—E. E. Morgan, Fort Wayne.....	December 31, 1922
		13th—H. M. Miller, South Bend.....	December 31, 1920

(See list of committees on page iv)

FREE

Sterile
Specimen
Containers
Slides
Culture
Media and
Complete
Fee Table
on request

Write or
Wire

Clinical Laboratory Analyses

The kind of clinical laboratory work that commands respect

Wassermann and other complement fixation tests ...\$5.00

Autogenous Vaccines. In single vials or ampules ..\$5.00

Lange Colloidal Gold test of Spinal fluid\$5.00

Tissue Diagnoses. Frozen section, paraffin or celloidin \$5.00

ABDERHALDEN PREGNANCY and other
Abderhalden reactions.....\$5.00

MILK, FOOD, SANITARY AND TOXOLOGICAL INVESTIGATIONS

Accurate Analyses of All Secretions, Excretions and Body Fluids

ESTABLISHED BY
DR. M. HERZOG
DR. H. C. SWEANY
DR. MEYER D.
MOLEDEZKY
DIRECTOR

Laboratory of
PATHOLOGY AND BACTERIOLOGY
THE MOST MODERN EQUIPPED LABORATORIES IN THE U.S.

1130 MARSHALL FIELD ANNEX—25 E. WASHINGTON ST.

PHONE
RANDOLPH
6552-6553
CHICAGO
ILL.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., JANUARY 15, 1920

NUMBER 1

ORIGINAL ARTICLES

THE VALUE OF THE ROENTGEN RAY IN THE DIAGNOSTIC WORK OF THE INTERNIST — ILLUSTRATED *

G. W. McCaskey, M.D.
FORT WAYNE, IND.

The responsibility of the internist has increased many fold within a few years. On the problems of diagnosis, with which he has mainly to deal, there have been focused many side lights, the use and interpretation of which entail additional obligations. Among these may be mentioned clinical blood chemistry. Of especial importance are the disturbances of carbohydrate metabolism as indicated by the blood sugar content in fasting and other conditions, giving important information in regard to diabetes, hyperthyroidism, etc.; the alkali reserve in its bearings on acidosis from any cause; the abnormal blood retention of uric acid, urea, nonprotein nitrogen, etc., in its bearings on renal disease; of blood lipoids especially in relation to diabetes, in which it may be the initial laboratory finding and the first danger signal. These and many other important features of blood chemistry can now be determined rapidly and with moderate technical skill by the latest types of colorimeters and nephelometers.

Of peculiar interest is the exact determination, by recent methods, of the so-called "metabolic rate" by the measurement of oxygen consumption, sufficiently simple to be clinically applicable at least in the hands of the special diagnostician. This rate is controlled mainly, if not entirely, by the thyroid, in coordination with other endocrine secretions. These endocrine functions are thus indirectly measured, furnishing for the first time a definite scientific answer to the question as to the hyper or hypo activity

of these glands in doubtful cases. A goiter, e. g., thought to be toxic, may be proven innocuous, while another so small that it can scarcely be felt, may be found highly toxic. Tachycardias, as well as chronic asthenic states, may find here their explanation. But this is by no means the limit of its clinical value. It unlocks for the clinician one of the secret chambers of life and lays bare facts which, in addition to their specific value in the study of endocrine disease, febrile disorders, anemias, diabetes, cardio-renal disease, etc., must give him a broader mental vision of the occult and intricate phenomena of health and disease.

There are many others to which time will not permit a reference, and I will proceed at once to the consideration of the roentgen ray—perhaps the most important of these side lights yet thrown on diagnosis—in its relation to the work of the internist. When I determined three or four years ago that roentgen-ray examinations must become a routine part of my diagnostic work, constantly and immediately available on a moment's notice during the progress of an examination, the difficulties which confronted me in the way of equipment and technical knowledge and skill seemed very great. I was strongly impressed, a little later, by the statement of Carman and Miller,¹ that the ultimate solution of the problem might be that the clinician should become his own roentgenologist. Experience and reflection, however, soon convinced me that there was no good and sufficient reason why a clinician should become a photographer. So I at once definitely declined the mechanical task of making roentgen-ray plates. It seemed equally obvious, on the other hand, that he should be familiar with and skillful in the interpretation of the screen picture, and this was all that I originally intended to do. It soon became evident, however, that a fluoroscopic study, while indispensable, revealing motion

* Read before the Twelfth Indiana District Medical Society, at Fort Wayne, Ind.

1. Carman, R. D., and Miller, A.: *The Roentgen Diagnosis of Diseases of the Alimentary Canal*, W. B. Saunders Co., Philadelphia, 1917.

which could not be practically shown otherwise, could not be depended on alone. Plates are essential, showing, as Carman and Miller¹ say, in discussing gastro-intestinal work, and it is largely true elsewhere, "minute deformities which could not be detected on the screen," and that "two or more plates should be taken in every case." It was perfectly obvious, there-



Fig. 1.—Chest roentgenogram illustrating antero-posterior fluoroscopic study. Note increased density entire right chest, probably very early tuberculosis.

fore, that the only rational working program would be to familiarize myself with screen and plate interpretation, and in addition command the most skillful assistance available, a program which our subsequent entrance into the war made difficult and at times impossible.

Now a very interesting, if not curious, evolution has taken place in the history of roentgen-ray work. This is nothing less than the swinging of the pendulum of the relative importance of roentgen-ray work from the surgical to the medical side. This has not been due in any measure to a diminution of its absolute importance and usefulness in surgery, which has undoubtedly increased rather than diminished, but entirely to its rapid, almost spectacular growth, in the field of internal diagnosis. This has been so well stated by Dr. Lewellys F. Barker² that I will borrow his language. He says: "When roentgen rays first came into clinical use they were employed chiefly by surgeons. Today in-

ternists make even greater use of roentgen-ray examinations than do their surgical colleagues. Indeed, so extensively are roentgenologic examinations made in diagnostic studies in general medicine that most internists either install a roentgenologic department in their own offices or form a close working alliance with a colleague who is a roentgen-ray specialist. Roentgenologic apparatus has recently been so greatly improved and the technic has been so much simplified that any intelligent person may after a relatively brief training become competent to make good roentgenograms of the skull, paranasal sinuses, teeth, chest, alimentary canal, bones, joints, etc. But the satisfactory interpretation of the roentgenograms is a far more difficult matter, requiring, like roentgenoscopic interpretations, long experience, much clinical knowledge, and sound judgment. It seems to me desirable that internists themselves become skilled in the reading of roentgenograms and in the interpretation of what can be viewed on the roentgenoscopic screen. It is hard to see how, otherwise, they are to become able to value the findings in a proportionate way in their diagnostic work, even when objective reports of the findings are made to them by skilled roentgenologists. There is an immense autodidactic advantage in the combination of personal roentgenologic interpretation with one's general clinical work. The internist who does not see the plates made from his own patients misses much; and the roentgenologist who only reports

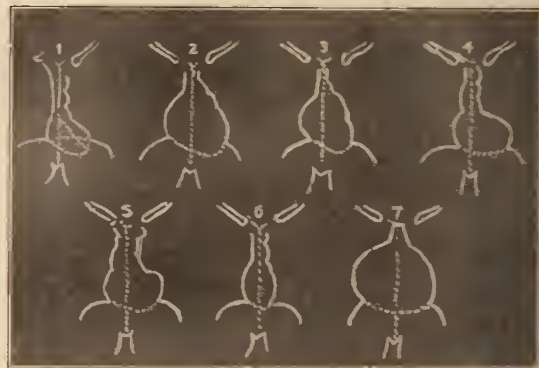


Fig. 2.—Heart Diagrams (from U. S. Army X-Ray Manual 1919, pp. 403-411). 1. Normal heart (these exact curves and angles seldom seen). 2. Mitral regurgitation. 3. Pure mitral stenosis. 4. Aortic regurgitation. 5. Aortic atheroma. 6. Dropped heart. 7. Pericardial effusion.

on his roentgen-ray examination and knows nothing of the clinical history of the patient is not likely to grow rapidly in power of interpretation. I am afraid that roentgenologists are often pressingly solicited by physicians for specific diagnostic judgments and that they too often yield to the importunity when they should

2. Barker, L. F.: The General Diagnostic Study by the Internist, N. Y. Med. Jour., Sept. 21, 28 and Oct. 5, 1918.

make it plain that their duty is done when they give an objective description of their findings. So common has it become for roentgenologists to attempt to arrive at diagnostic conclusions from their studies alone that it is sometimes difficult to get from them the objective description that one desires, either alone or accompanied by a diagnostic impression. Instead, the

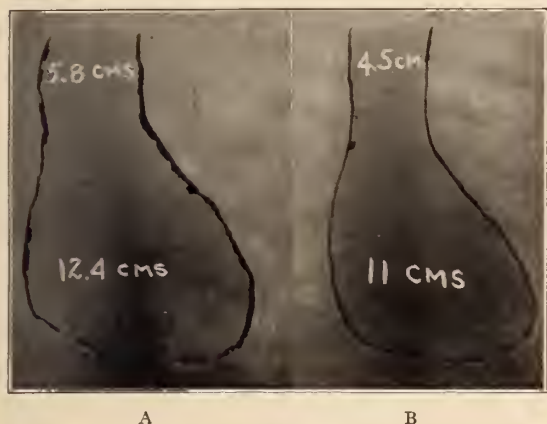


Fig. 3.—Comparison heart shadows — A at 28 inches and B at 6 feet (teleroentgenogram).

reports of 'chronic infectious arthritis,' 'pulmonary tuberculosis,' or some other diagnosis come in. That this unsatisfactory state of affairs, which still exists in many places, will soon be remedied, every one who desires that roentgenology and internal medicine reciprocally benefit one another to the utmost will hope.

"Certain roentgen-ray examinations I have made as a routine in every case in which I attempt a general diagnostic study: Roentgenographic: (1) paranasal sinuses; (2) dead teeth and unerupted teeth. Roentgenoscopic: (1) thorax with heart, aorta, lungs, pleurae, and mediastinum, and, (2) gastro-intestinal tract after ingestion of barium. In addition special roentgen-ray examinations are made according to indications derived from the anamnesis and the general physical examination.

"The following are made as indicated: (1) stereoscopic roentgenograms of skull and sella turcica; (2) stereoscopic roentgenograms of lungs and pleurae; (3) teleroentgenogram of heart; (4) serial roentgenograms of gastro-intestinal tract; (5) roentgenograms of gallbladder area; (6) roentgenograms of bones, joints, and spine; (7) roentgenograms for renal calculi; (8) pyelograms and ureterograms after thorium injection."

This scheme of roentgen-ray work, reflecting as it does the judgment and experience of the head of one of the leading internal medicine clinics of this country, is interesting and suggestive. It corresponds substantially with the

routine which I have been using for some time in my own work, with the exception of routine roentgenograms of the paranasal sinuses, which I promptly adopted and which has given me many surprises.

The exact method of procedure, so far as the routine roentgen-ray study is concerned, depends somewhat on the symptoms and history of the case. The first thing, assuming that a careful history has been taken, which by itself will often furnish a presumptive diagnosis to be confirmed, modified or rejected, might well be a fluoroscopic examination of the chest. A preliminary physical examination has perhaps already been made, but it very frequently happens that the diagnostician will want to repeat it after getting "pointers" from the screen. In a few minutes time as much information of both a negative and positive character can be obtained as by any other means in as many hours. With the important exceptions of adventitious sounds and the indispensable information communicated through the palpating hand, the main facts of physical diagnosis of the chest are instantly visualized with an accuracy which can only be crudely approximated by laborious effort.



Fig. 4.—Roentgenogram of chest with rubber tube in Esophagus illustrating diagonal fluoroscopic study.

The patient is placed behind the vertical screen and the diaphragm opened full, and a general view of the thoracic contents obtained (Fig. 1). In the center of the field, extending from top to bottom, we find a broad irregular shadow, of very complex origin. It includes the vertebral column, the heart and great blood vessels, and the esophagus, together with all other contents of the mediastinum.

The structures above enumerated can be quite clearly differentiated both fluoroscopically and roentgenographically, giving visualized concepts for diagnostic use. On either side of this shadow we see a more or less brightly illuminated area corresponding to the pulmonary tissue, highly translucent to roentgen rays.

Below we see on either side the two convex domes of the diaphragm.



Fig. 5.—Normal Stomach. a. Magenblase. b. Constriction at lower end Magenblase. c. Antrum. d. Cap.

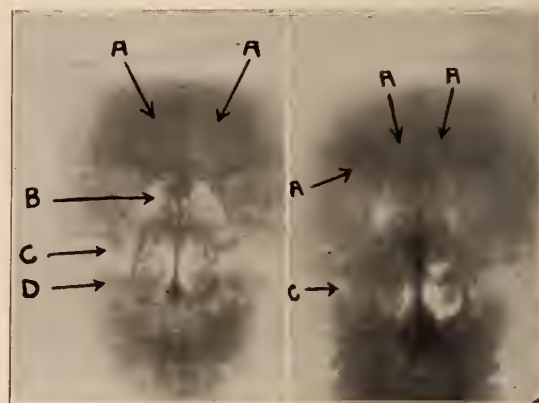
Studying the large central shadow, we find its left border made by the heart and large vessels, extending irregularly downward and outward; its lower border fusing with the shadow of the diaphragm, while its right border, starting at the cardio-hepatic angle, extends a variable distance to the right of the sternum. In this, the antero-posterior view, the left border is diagnostically the most important part of this shadow. Significant variations occur, e. g., in hypertrophy of the left auricle from mitral stenosis, hypertrophy of the left ventricle, and in pericardial effusions. It is here also that we study the movements, easily recognizing, and sometimes differentiating, the arrhythmias, the extent of the cardiac excursion, etc.

The heart diagrams herewith presented (Fig. 2) are very suggestive, and while not to be taken too literally, indicate, in a general way, the character of the information obtained by a rapid fluoroscopic survey of the heart.

It must be constantly kept in mind that either a fluoroscopic examination of the heart, which is

usually at a distance of about 2 feet, or a plate, taken at the same distance, greatly exaggerate the actual size of the organ. It occurred to me that it would be quite worth while to present a comparison of these two heart shadows taken on a plate and they are, therefore, herewith shown in Figure 3. The one to the right is the teleroentgenogram taken at a distance of 6 feet, and on the original plate represents the actual size of the heart with a very small error amounting, it is thought, to about 6 per cent. Of course all that can be done in the illustration is to show the relative size for comparison.

The fluoroscopic picture of the lung tissue is extremely important and any gross departure from the normal, such as tumors, cavities, tubercular infiltrations, and pleuritic adhesions or effusions can be readily seen. The recognition of early pulmonary tuberculosis is one of the most important clinical problems in the civilized world. I am fully convinced that roentgen-ray evidence is the earliest evidence that can be obtained of its existence, and that it cannot progress far without showing roentgen-ray signs. In all doubtful cases stereoscopic roentgen-ray plates are essential. Their necessity is to be determined by the fluoroscopic examinations plus the history, symptoms and physical signs, without which no diagnostic conclusions can be rationally formulated. The real difficulty does not lie in getting a roentgen-ray record of the very early pulmonary changes in tuberculosis,



No. 1 No. 2
Fig. 6.—No. 1 Normal Sinuses (a) Frontal areas (b) Ethmoids (c) Antra (d) Unruptured molars. No. 2 Sinusitis in left frontal and antral regions (left side of illustration).

but in differentiating them from changes due to other infections. This is the real crux of the roentgen-ray side of the diagnosis.

Returning now to the fluoroscope, let us inquire what evidence we can get for or against incipient pulmonary tuberculosis. To be directly recognizable by the fluoroscope the lesion must obviously be large enough and dense enough to

cast a shadow. The roentgen-ray plate will record it when too small for the eye to see the screen shadow, just as the photographic plate of the astronomer will show stars that the eye cannot see. Nevertheless, in many cases in which



Fig. 7.—Healed tubercular process 8th dorsal vertebrae. Note typical antero-posterior triangulation of body of vertebra. Arrow pointing to constructive process.

physical signs are absent or doubtful, the fluoroscope will show definitely impaired translucency to roentgen rays.* This is best determined by having the patient take several deep respirations. Normally the lung areas should be much lighter with inspiration and darker with expiration, and if this does not happen in any area the lung

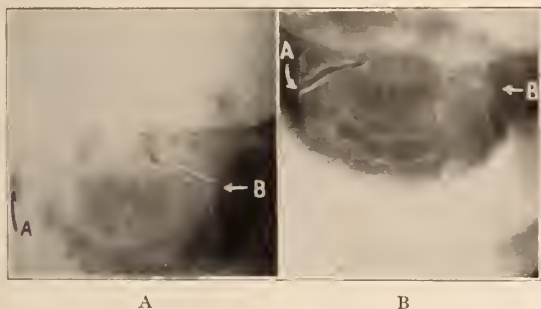


Fig. 8.—A. Normal atlo-axoid articulation both sides. R. at A not well reproduced. B. Arrow B pointing to obliterated atlo-axoid articulation.

tissue is under suspicion. There is pathology, but it is probably impossible to say just what its exact nature is; perhaps subsequent stereoscopic plates will settle it, but it is more likely to re-

quire in addition sound clinical judgment based on this and all other data.

Limitation of motion of one diaphragm as an indication of disease has been emphasized by some clinicians, but I am strongly inclined to believe that it usually belongs to the later signs. It is of course easily recognized by the fluoroscope and by this means alone. Pleuritic adhesions and effusions, together with other gross lesions easily seen need not detain us here in considering the very early diagnosis.

The hilus shadows are moot points in the diagnosis of pulmonary tuberculosis. A very good judgment of them can be formed from the screen, but of course their detailed study requires a plate. While present in every adult, I believe with Morton³ that they are important objects of study, and are very possibly, if not

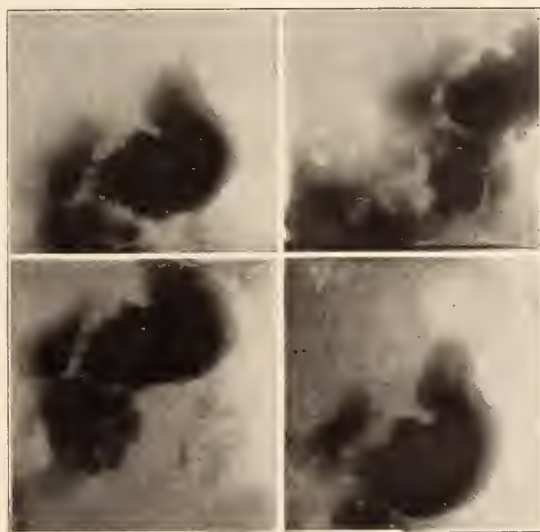


Fig. 9.—Illustrating serial examination of cap and lower end of stomach at 5 minute intervals. Described under case report No. 4.

probably the frequent starting points of the pulmonary infection, but I cannot here discuss this question further.

Having completed our fluoroscopic antero-posterior study of the chest, we take another very important or diagonal view from in front backward and to the left, as shown in Figure 4. Here, instead of a large central shadow between two large bright areas, we have a central bright area, the mediastinal space, with two long shadows on either side, the vertebral column presenting on the screen to our left, and the heart and great vessels to our right with bright pulmonary areas on either side. This view of

3. Morton, E. R.: A Textbook of Radiology, C. V. Mosby Co., St. Louis, 1918. Morton says: "Tuberculous invasion of the lungs takes place much more frequently at the hilum than generally supposed, and when it does so the ordinary methods of examination fail to detect the mischief until it has advanced to some point nearer the surface."

* See right side of chest in Figure 1.

the heart and great vessels is of the utmost importance, both fluoroscopically and roentgenographically. Coursing down through the central bright area will be seen a narrow shadow, caused by a small rubber tube in the esophagus. This visualizes this important viscus, and it will be readily understood that by having the patient swallow an opaque food such as barium, we can watch peristalsis, determine the existence and site of strictures, or diverticula, and study the

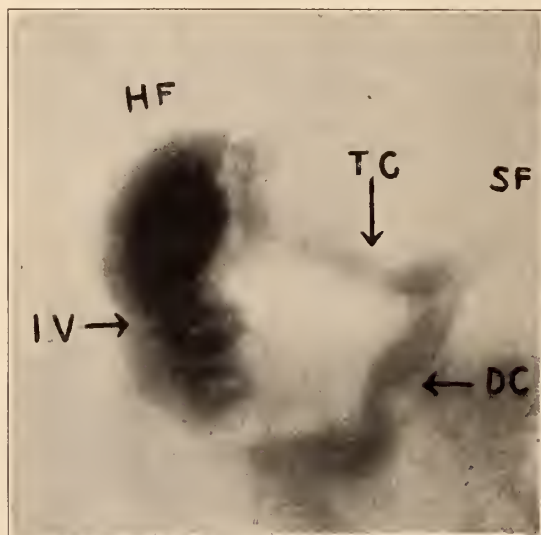


Fig. 10 A

details of the not very rare condition known as cardiospasm.

The fluoroscopic examination of the gastro-intestinal tract, after the ingestion of a barium or other opaque meal, should be routine in nearly all cases, as it quickly gives important information regarding the esophagus (by watching the descent of the barium in the diagonal position shown in Figure 4), the size, shape, tonicity, mobility, motility of the stomach, and the patency of the pylorus in the antero-posterior view. This information can be obtained in less than ten minutes, with the exception of the last two points, which may require more time. As the barium is seen to enter the stomach one of several things may happen. In a stomach with normal tonicity the bolus will be momentarily arrested at the upper end of the closed vertical tube corresponding with location B in Figure 5. This is at the lower border of the magenblase. After hesitating for a variable time, depending on the degree of tonicity, it is seen to "canalize" the stomach and descend to the pyloric end. In cases of marked gastric atony it falls rapidly to the pyloric end, and accumulates there at once. Under normal conditions, as the stomach fills,

the widening vertical tube retains sufficient tonicity to hold its contents up to a greater or lesser extent in tubular form and allow gradual filling of the antrum. We watch the stomach fill and note its shape, size and position. By manipulation of the stomach contents its mobility and freedom from adhesions is determined. In cases of pericholecystitis, e. g., it may be adherent to the gallbladder. In a recent case referred by a surgeon for diagnosis, I was able easily to determine this point, and confirm the suspicion of gallbladder disease. These facts were all verified by operation. Other adhesions from perigastritis over ulcer sites may be recognized. The extent of the sagging from the full weight of the barium meal is informative. If a little more time can be given, or possibly within a few minutes, the duodenal cap may be filled, and this together with the character of the peristaltic waves which can be easily seen and studied, establishes pyloric potency, active gastric motility, and probably at once excludes stasis.



Fig. 10 B

Fig. 10.—Chronic colitis. Note lack of haustration in large bowel. Slight harium shadow in transverse colon (T C) indicative of hyperirritability. Note large cecum which showed marked stasis. Also patent ileo-cecal valve (I V) which allowed regurgitation of barium enema into ileum. A. Showing transverse colon. B. Showing faint trace transverse colon and typical lack of haustration in other parts large bowel. (Plates taken at different times, each one illustrating some features better than the other.)

It is impossible in a paper of this character to discuss these questions fully. If there is nothing in the history, symptoms or physical examination suggesting important gastro-intestinal pathology, this routine is sufficient.

If a more complete roentgen-ray study is indicated, plates are essential, but this is too large a subject to be here discussed at any length. Enough has been said to indicate the important laboratory aid afforded the internist by the roentgen ray study of patients in thoracic and abdominal disease. Nothing exhaustive was either contemplated or possible within the limits of a society paper.

There are many other aspects of internal diagnosis in which the roentgen ray is of great help. Without attempting to either enumerate or discuss them, I will introduce a few case records with illustrations and a few comments which will probably serve the purpose. For obvious reasons these case reports and the comments on them will be as brief as possible, and will be limited almost entirely to their strictly radiologic aspects in their bearings on diagnosis.

The paranasal sinuses are now receiving increasing attention as possible sources of focal infection. Acting on Barker's² suggestion radiograms are made routine in all cases in which a general diagnostic study is made. The following case is in point:

CASE 1.—Mr. M., aged 42, was referred for cardio-respiratory disturbances, the latter predominating and being out of all proportion to the demonstrable cardiac symptoms or lesions. There were no complaints pointing to the paranasal sinuses. No other source of infection could be found, and a radiogram showed—as illustrated in No. 2, Figure 6—very decided opacity of the left antrum together with some clouding of the left frontal sinus. The probable source of the infection was thus determined. It is interesting to note that after seeing the skiagram, transillumination of the antrum showed it to be perfectly dark, showing that this could have been determined without the roentgen ray. The advantage of the roentgen ray lay in the fact that by a very simple procedure all the important sinuses could be visualized at once.

CASE 2.—Mr. H., aged 57, referred on April 29, 1919, because of abdominal pain. This was supposed to be due to some intra-abdominal lesion. A careful study of the case, however, pointed to the probable fact that it was due to posterior spinal nerve root irritation. There was a slight prominence at about the eighth to ninth dorsal spines, scarcely amounting to a definite kyphosis, and a little discomfort in this area. A roentgen-ray plate of the spine showed a distinct swelling or enlargement on the anterior surface of the corresponding vertebrae.

The general diagnosis of tuberculosis was made on other grounds, and the patient, preferring absolute rest in bed to mechanical supports, was ordered to bed and forbidden to sit up for an instant. This order he strictly obeyed

for five months, at which time (Nov. 11, 1919) the accompanying radiogram (Fig. 7) was taken. The original plates were destroyed by accident. The illustration shows the constructive healing process following the arrest of the tuberculous process, which occurred symptomatically at the end of about two and a half months. The primary focus was shown by stereoscopic chest plates and other clinical evidence to have been in the lungs.

CASE 3.—Mrs. M., aged 54, first seen on Nov. 6, 1919, complaining of intense cervico-occipital pain, limited to the right side. This was in part spontaneous but mostly induced by rotation or flexion. With rotation a loud snap occurred which could be heard at several feet distance, and was associated with most atrocious pain. I at first supposed that this was due to some gouty, calcareous, or other deposit in the tendinous structures. The real cause was determined by the radiogram (B Fig. 8) to be an organic lesion of the right atlo-axoid articulation. In the left articulation the translucency of the intervertebral cartilage to roentgen rays shows it to be unaffected. In the right joint not only is the cartilage entirely opaque or possibly transformed, but the bony structures above and below are of greatly increased density, indicating some type of unilateral spondylitis.

CASE 4.—Mr. M., aged 61, seen on Sept. 18, 1919, complaining of severe stomach symptoms following meals. Both the fluoroscope and the plates showed marked stasis at the end of seven to eight hours, and the symptoms were such as would be found in such a case. The serial pictures illustrated in Figure 9 were taken at five-minute intervals at seven and one-half hours after the barium meal, at which time fluoroscopic examination showed extreme hyperperistalsis. There is probably the roentgenographic evidence of a healed ulcer on the lesser curvature of the stomach near the pylorus, which could not, however, account for the stasis.

The patient had an intense hyperchlorhydria, and made a complete clinical recovery in less than a week on atropin and alkalis, which at last account still continues, indicating that the stasis was due to some spastic condition.

CASE 5.—Mr. S., aged 52, seen on Nov. 3, 1919, complaining of very painful diarrhea with bloody and purulent stools. A barium meal per os showed no pathology until the cecum was filled, where it remained an abnormally long time, indicating cecal stasis. Later a barium enema was given. This readily filled the entire colon, up to and including the cecum, as shown in Figure 10, which in conjunction with the original cecal stasis illustrates some very important pathologic points determinable by roentgen ray. Especially important is the sausage shape of the descending colon (D C) with a complete absence of haustration. Next we

notice the nearly complete absence of barium in the transverse colon, which can be barely seen (T C), and indicating hyperperistalsis of this part of the colon, probably as a result of an ulcerative process. Perhaps the next most important feature is the well-filled cecum with its accompanying stasis, as shown in the plate and in the previous ones not reproduced, and which indicates a nontuberculous process, in view of the clinical studies of Brown and Sampson,⁴ in which they showed hyperperistalsis of the cecum and ascending colon in tuberculous lesions of these parts which are the usual sites of intestinal tuberculosis.

Still another point is the incompetence of the ileocecal valve, the barium enema having passed freely into the ileum. It is said that none of these features occur in mucous colitis but in the ulcerative type.

SUMMARY

The remarkable advances made within recent years have thrown on the internist ever increasing obligation. By such methods as the determination of blood contents of sugar, urea, non-protein nitrogen, lipoids, etc., of oxygen consumption in its relation to metabolism, and particularly endocrine disease; and especially by the use of the roentgen ray, by far the most important of all, it has become possible to discharge our obligations to our patients by the more or less exact determination of pathologic conditions hitherto undeterminable or at best obscurely so. By so doing the patient and his physician are obviously placed on a vantage ground. One should never fail to emphasize the fact that these methods never make a complete or rational diagnosis but are simply factors, albeit sometimes indispensable factors, in the general diagnostic judgment.

So far as the roentgen ray is concerned, on every patient whose condition justifies the submission of the case to the special diagnostician, at least a few very simple routine roentgen-ray procedures should be carried out. Focal infections must always be excluded in such cases, and abscesses of teeth and sinuses cannot be otherwise excluded with certainty. A fluoroscopic examination of the chest and of the gastro-intestinal tract after the ingestion of barium should be made. In a very few minutes gross lesions of heart, lungs, mediastinum and stomach may be determined or excluded with a strong degree of probability. In special cases in which history, symptoms, or physical examination make it advisable, roentgen-ray plates will give details which the fluoroscopic screen cannot furnish. A few case

histories are introduced illustrative of the value of these methods. In Cases 2, 3, and 5 it is perfectly obvious that an exact diagnosis could not otherwise have been made.

I wish to acknowledge my indebtedness to my clinical assistant and roentgenologist, Dr. Don J. Royer, for his very able assistance in this work.

SOME FRACTURES OF THE PELVIS*

DR. CHARLES HAYWOOD
ELKHART, IND.

Fractures are always an interesting subject to the surgeon because nearly every case presents an individual problem in the matter of diagnosis and gives much latitude for the exercise of mechanical ingenuity in the alignment of fragments, maintenance in apposition, and treatment of complications.

Interest in the subject of fractures and their treatment generally has been augmented by the demands of industrial surgery and the possibility of more careful diagnosis, improved treatment and checking up of results.

This subject is presented, not because of any exceptional experience by the writer or the involvement of any particular procedure as to treatment, but in consideration of the fact that either this class of fractures is becoming more frequent or, what is more probable, is becoming more and more recognized and while many are without complications others are attended with grave danger to the patient. It is hoped that a profitable exchange of ideas and experiences may result from the discussion to follow.

This class of fracture is undoubtedly being recognized with greater frequency due in a degree to more careful observation in hospital practice and careful roentgen-ray diagnosis.

The opinions of various writers and statisticians as to the frequency of pelvic fractures differ. One standard surgery published twenty-five years ago states that out of over 60,000 of all kinds of fractures there were 0.27 per cent. of pelvic fractures. Roberts and Kelly in their recent work quote series of cases from several authors in which the percentage of pelvic fractures run from 0.54 to 1.22 per cent. Plagemann's statistics from Müller's Clinic at Rostock based on the roentgenographic diagnosis of 1,393 fractures shows 1.22 per cent. of fractures of the pelvis.

Before the use of the roentgen ray many cases were diagnosed postmortem only and undoubtedly many more were not recognized at all.

4. Brown, L., and Sampson, H. L.: The Early Roentgen Diagnosis of Ulcerative Tuberculous Colitis, J. A. M. A. 73: 77 (July 12) 1919.

* Read before the Indianapolis Session of the Indiana State Medical Association, September, 1919.

Reports from the Presbyterian Hospital, New York City, covering a period of about six years show that fracture of the pelvis occurs about one-fifth as often as fracture of the femur and about twice as often as fracture of the vertebrae.

The human pelvis, so called from its resemblance to a basin, is stronger, more massively constructed, than either the cranial or thoracic cavity. It is composed of four bones; the two ossa innominata, which bound it on either side and in front, and the sacrum and coccyx, which complete it behind. The development of the os innominatum is by eight centres; three primary—one for the ilium, one for the ischium and one for the pubis; and five secondary—one for the crest of the ilium, one for the anterior inferior spinous process, one for the tuberosity of the ischium, one for the symphysis pubis, and one for the Y-shaped piece at the bottom of the acetabulum.

The mechanical function of the pelvis, aside from protecting the viscera, is mainly for the support of the spine whether sitting or standing. Strength is added to this structure by the interruptions of the bony girdle at the symphysis and the sacroiliac joints, which arrangement assists in breaking shock. The real motion existing at the sacroiliac joints is slight under ordinary circumstances, but is of importance in childbirth. Theoretically the weight of the body transmitted through spine tends to force the sacrum down between the innominate bones, and also to carry the promontory downward and forward into the pelvis. Assuming the pelvis to be a fixed part, the tendency to displacement of the sacrum in either direction is resisted by the posterior sacroiliac ligaments. The sacrum is not really a keystone, for the anterior surface is broader than the posterior for the most part. The weight in standing is transmitted to the thigh bones, in sitting to the tuberosities of the ischia; in both cases the parts of the pelvis running to the pubes act as ties to prevent the spreading of the arch. The circumference of the acetabulum is of strong bone to resist pressure from the joint, and in the erect position a thickened portion of bone runs from the socket directly upward to the crest of the ilium. The thinness of the bone at the bottom of the acetabulum in all ages, and the meeting there in childhood of the three bones makes it a weak place.

The position of the pelvis in the living when the figure is erect, may be approximately represented by placing it so the anterior iliac spine and the symphysis pubis lies in the same vertical plane. The plane of the inlet of the true pelvis is represented by a line drawn from the base of

the sacrum to the upper margin of the symphysis pubis, forming with the horizon an angle of 55 to 65 degrees. A line carried at right angles with this at its middle would correspond at one extremity with the umbilicus and at the other with the middle of the coccyx. It is interesting to note that the line of gravity of the head, which passes through the middle of the odontoid process of the axis, bisects a line drawn transversely through the middle of the heads of the thigh bones.

While a technical description of the anatomic variation between the male and the female pelvis is not necessary for the purpose of this paper, it may be interesting to recall that the female pelvis is lighter in its construction than that of the male; its surfaces are smoother and the indications of muscular attachments less marked. In the female pelvis the iliac fossae are broad and the spines of the ilia widely separated. The inlet and the outlet are larger, there is less prominence of the sacral promontory, the spines of the ischia project less, thus rendering the cavity more capacious.

In considering the various types of fractures of the pelvis, we must recall that the bony ring is composed of two ossa innominata and that each innominate bone is made up of three portions, the ilium, ischium, and pubes. Fractures of this bony ring are either single or multiple, depending on whether one or more bones are broken. The most frequent fracture is that of a single bone which may or may not involve the pelvis. A multiple fracture is usually considered as one which passes through the bony ring in two places as the pubis and sacrum or the rami of the pubis on both sides or similar combinations. If the line of fracture passed through the pubis above and the corresponding ramus of the ischium below, this would be through the obturator foramen and would be considered as a single fracture of the pelvis because the pelvic ring is broken only at one place.

Generally speaking, fractures of the pelvis require a considerable degree of violence for their production, although there are some reported cases in which the force is slight. Direct or indirect violence and rarely muscular action is the causative factor. The passage of vehicles across the pelvis, blows, falls from a height, etc., are frequent causes. Most of the cases seen personally were railroad accidents where the employee was caught between the bumpers of cars or was side-swiped between cars and engines. Several cases were the result of the patient being thrown out of a carriage or auto and falling on the thigh.

The character of fracture depends on the direction of the fracturing force, and is usually limited to certain definite areas except when the fracturing force is an extreme form of crushing. Fracture occurs where the thin portions of the bone unite with the thicker portions, or where the pubic, iliac and ischiatic elements of the bone before adult life are united by cartilage. The pelvis consists of two semicircles, each formed of an anterior and a posterior arm, with the acetabulum as the summit. In the anterior arm the line of fracture occurs at the tuberosity of the pubes, the iliopectoneal line, the ascending ramus of the ischium, and at the junction of the ascending ramus of the ischium with the descending ramus of the pubis. In the posterior arm the fracture line passes vertically from the pelvic bone down through the greater sciatic notch of the ilium, through the lateral masses of the sacrum, irregularly diagonal through a portion of the ilium and sacrum, or through the sacroiliac synchondrosis.

Fractures of the ilium seem to be the most frequent and are often the result of very moderate trauma. Isolated fractures of the body or tuberosity of the ischium are considered rare although fracture of the body may occur in fracture of the floor of the acetabulum. Next in frequency to fractures of the ilium seem to be those of the pubes, and these present all sorts of combinations, including a fracture of the horizontal ramus on one or both sides or of the descending ramus on one or both sides, or at the junction of the descending ramus with the ischium of one or both sides. Fractures of the acetabulum occur, sometimes associated with fracture of the rami of the pubes. Then there are those involving the rim of the acetabulum in association with partial dislocation of the head of the femur and still another class where there is fracture of the acetabulum with incomplete or complete penetration of the head of the femur through it into the pelvic cavity, the so-called central luxation of the femur.

A very severe form of pelvic fracture is found where the fracture line passes through the superior ramus of the pubes or the ischium, and the posterior part of the fracture line passes vertically through the ilium behind the acetabulum, or through the sacrum, or partially through the ilium, the sacrum and the sacroiliac synchondrosis. In this case there may be marked displacement of the middle fragment. Cases of separation of the sacroiliac synchondrosis are not frequent. Separation of the symphysis pubis and the sacroiliac synchondrosis are occasionally seen. This may result in a vertical displacement of one half of the pelvic ring.

The symptoms of pelvic fractures are well known, but in some cases may seem so apparently unimportant that the diagnosis may not be made at the time, with the result that permanent disability may occur later.

It is important that every patient who has had an injury resulting in pain or other symptoms in connection with the pelvis or hips should be subjected to a roentgenographic examination, because some pelvic fractures present very few immediate symptoms and suffer little inconvenience at the time.

It is convenient by way of emphasis to refer to the symptoms as general, abdominal, and those involving the genito-urinary system. Shock is often severe, and even in mild cases which recover quickly may be pronounced. Some cases with mild shock which recover quickly may be able to walk and suffer little inconvenience, but still have a fracture. Fever is common; in fact, it seems practically the rule to have some rise in temperature. The abdominal symptoms consist of pain which may or may not be severe. Pain may be accentuated on pressure or movement. There may be inability to move the leg or bear weight on the injured side because of the pain. More or less rigidity of the muscles on the injured side is to be expected; this is readily understood when we consider the wide attachment of the abdominal muscles to the pelvic bones. Nerve injury, infiltration of the psoas muscle with blood, or puncture of the muscle with sharp fragments of bone may result in inability to flex the leg. Fracture of the pelvis may be distinguished from fracture of the neck of the femur by the fact that in the former there are apt to be areas of echymosis above Poupart's ligament, while in the latter the echymosis is more liable to be below the ligament. In fracture of the pubes and separation of the symphysis pubis there may be tenderness on pressure, localized pain, also pain on lateral pressure, together with abnormal movement. Fractures of the acetabulum associated with penetration of fragments of the head of the femur into the pelvic cavity present an apparent shortening of the leg, loss of prominence of the trochanter major, and outward rotation of the thigh with loss of motion. Fracture of the acetabulum simulates dislocation of the head of the femur.

Fractures of the pelvis are oftentimes not so important as to the damage done to the pelvic bones themselves, but the real gravity arises from injury to the pelvic contents, which so frequently accompanies these fractures. The chief complications are injury to the bladder and urethra, the rectum, the vagina, the iliac vessels, the

visical and pudendal vessels, the sacral nerves and the intestines.

From a clinical point of view, probably the complications referable to the genito-urinary system are the most interesting and the most important.

Lesions of the bladder may result from the force of the blow which produced the fracture, particularly if the bladder is distended. Bladder injury due to puncture by fragments of bone is usually extraperitoneal, whereas the primary rupture is generally intraperitoneal.

The symptoms of these lesions together with trauma to the urethra include difficult urination, or impossible urination, blood in the urine, difficulty in introducing catheter, etc., in various combinations. The injuries resulting to the other pelvic contents are usually the result of crushing or tearing by displaced fragments of bone. It is not uncommon to have an injury to the common iliac, the external iliac, or branches of these arteries. The nerves most frequently involved seem to be the obturator, and sciatic, and the sacral plexus.

Paul reports fifty-four cases of pelvic fracture from the hospital at Hazelton, Pa., in the heart of the coal mining district. It is interesting to note not only the frequency of pelvic fractures in the mines but their severity as well. In this series the mortality was 50 per cent. There were five ruptures of the bladder, nine ruptures of the urethra and one rupture of the rectum with many other serious complications.

Quain in 1916 made a résumé of all reported cases, 127 in number up to that date, of rupture of the bladder associated with fracture of the pelvis. In a majority of these cases it was found that a spicula of bone had perforated the bladder, and most lacerations thus caused were extraperitoneal. The mortality in this series of cases was 74 per cent. It is worthy of note in this connection that eighty-three cases of this series reported before 1890 had a mortality of 86.7 per cent., that forty-four cases since 1890, during the period of aseptic surgery, had a mortality of less than 48 per cent., and Quain observes, "As a further proof of the increasing efficiency of scientific surgical treatment in this class of injuries, we may note that out of 21 cases reported since 1905, only eight died, reducing the mortality to 38 per cent."

In considering the treatment of pelvic fractures the first thought is that of reduction of the fragments and means for holding them in apposition. Attempts at reduction of displaced fragments call for the exercise of good judgment for the reason that violent manipulations are generally to be avoided because of their tendency

to increase shock and also the danger of increasing the extent of visceral injury. The careful manipulation of the limb is permissible and oftentimes necessary and may assist the digital manipulations made through the rectum or vagina. The ingenuity of the surgeon is called into play, as in case of any fracture, to employ proper means of immobilization and to make the patient comfortable. In fractures of the crest of the ilium probably supporting sand bags are all that is necessary and are usually preferable to bandaging. In fractures of the pubes and rami of the ischium some employ a cast, but the same service it would seem can be accomplished by applications of adhesive strips. In wide separation of the fragments or in separation of the pubes it may be necessary to resort to wiring, as will be illustrated by a case. Fracture of the acetabulum and penetration by the head of the femur will require traction laterally and probably the Buck extension. Rupture of the bladder and urethra as well as other serious pelvic injuries call for special operative interference, consideration of which it is hoped will be brought out in the discussion.

Some types of pelvic fractures to illustrate the various points discussed will be shown on the screen.

CASE REPORTS

CASE 1.—Mr. J., N. Y. C. employee. Caught between two freight cars. Fracture of outer portion of ilium with quite marked displacement. Treatment by adhesive strips. Recovery.

CASE 2.—Mr. R., N. Y. C. employee. Caught between engine and door casing. Vertical fracture in ilium, separation of left sacro-iliac synchondrosis, and moderate separation of symphysis.

CASE 3.—Mr. G., aged 35, N. Y. C. employee. While riding on a box car at the gravity yards jumped to avoid collision, struck on left side on the ground. Skiagraph showed fracture with some splintering at junction of left descending ramus of the pubis and ischium, also a mild displacement of the left sacro-iliac synchondrosis. Patient had some blood in urine and later some pus. Immobilization by adhesive strips and sand bags was the only treatment. Complete recovery.

CASE 4.—Mrs. D. Auto accident. Fracture of crest of right pubis. Rest in bed. Recovery.

CASE 5.—Mrs. B., aged 79. Thrown from carriage. Fracture of horizontal ramus of pubis. Treatment consisted of adhesive strips and rest in bed with complete recovery.

CASE 6.—Mrs. I. Thrown from carriage in a runaway accident, alighting on left hip. Fracture of horizontal ramus of pubis with some splintering and displacement. Recovery.

CASE 7.—Mr. S., N. Y. C. section hand. Stepped on track in front of a rapidly moving speeder and was thrown some distance into the ditch. Roentgenographic examination showed dislocation of left hip with fracture of ascending ramus of left ischium. Shock was very marked. Some blood in urine which rapidly cleared up. Dislocation was reduced under anesthesia. A cast was applied and removed after two weeks. Adhesive strips were then applied around the pelvis for the purpose of immobilization. Patient suffered a great deal of pain in the left limb and was unable to use same. The case was lost sight of soon after this, but it is evident that there had been some severe nerve injury as a result of the fracture.

CASE 8.—Mr. S., aged 50. Thrown out of an auto. Fracture of descending ramus of left ischium. Treated by sand bags and adhesive strips. Recovery.

CASE 9.—Mr. R., aged 40. Fell from scaffold 15 feet high onto saw-horse, striking on right hip. Skiagraph showed numerous fractures of the ilium with fracture of horizontal ramus of ischium with a lateral displacement inward of the acetabulum and head of the femur. No urinary symptoms. While being moved from one room to another, patient suffered pulmonary embolism, developed an unusually severe single lobar pneumonia complicated with paralysis of the muscles of deglutition. The fracture was treated by sand bags only and patient in spite of the very severe complications made an uneventful recovery.

CASE 10.—Mr. O., N. Y. C. employee. Fell from a platform a distance of 14 feet to the ground, striking on side. Separation of left sacro-iliac synchondrosis with fracture of the ilium. Treatment by adhesive strips. Recovery.

CASE 11.—Mr. P., N. Y. C. employee. Crushed between cars. Separation of the right sacro-iliac synchondrosis with fracture into ilium. Blood in urine. Treatment by adhesive strips. Recovery.

THE RELATIVE MERITS OF SURGERY, RADIUM AND ROENTGEN RAY IN TREATMENT OF UTERINE FIBROIDS *

E. E. PADGETT, M.D., F.A.C.S.
INDIANAPOLIS

In considering the treatment of any pathologic condition one should keep in mind four points. These points have been well stated by J. G. Clark as follows:

1. The remedy must effectively cure.

2. It must be attended by no greater risks than other known methods of treatment.

3. It must be unattended by immediate or remote complications; and

4. The cure must be permanent.

Upon the advent of the roentgen ray as a therapeutic agent practically every human pathologic condition passed under its influence, many to their great improvement and many others to be unimproved and still others made worse. Time and continued efforts finally found its field of usefulness and established it as a well-grounded therapeutic agent in certain classes of cases. As such it remains today. Among its cases there have been many uterine fibroids with results good, bad and indifferent. Within the past five years the use of radium in these cases has been given a thorough trial and there has elapsed about enough time for us to begin to draw conclusions as to the actual value of radium in these cases. We are indebted to J. G. Clark of Philadelphia and to Howard Kelly of Baltimore for the best reports on this line of treatment and it is from their reports that a good part of our references will be drawn. To compare these reports of results with those obtained by surgery in similar cases is the excuse I have to offer for bringing this matter to your attention.

In considering the uterine fibroid we may say as to etiology that its cause has been attributed to practically everything from continency to syphilis, which fact is in itself an admission that we have known very little of the real cause. Many theories have been advanced, but they remain theories only. A few facts constant in appearance may be noted; these tumors are usually multiple, rarely single; they occur most frequently in the period of sexual activity, and child-bearing apparently has no influence in causing them. The old classification of fibroids as to their seat of origin will suffice and I wish only to call your attention to their relative frequency. Interstitial, 60-70 per cent.; subserous, 20-30 per cent., and submucous, 10-15 per cent. As regards symptoms we shall consider only those vital to the patient and those which must be relieved before one can justly claim benefit from any method of treatment.

These are best divided into two classes:

A—Local, and under this the three prominent symptoms are: (1) hemorrhage; (2) pressure; (3) degenerative changes.

B—General, and under this: (1) the effect on the circulatory system, and (2) effect on the kidneys.

* Read before the Indianapolis Session of the Indiana State Medical Association, September, 1919.

It is the symptom of hemorrhage that as a rule first sends the patient in search of relief. Also to this symptom is due the anemia often seen and by its extent the nature of the treatment is often determined. Further, it is the symptom that is most often relieved regardless of the method of treatment employed.

Pressure deals with the effect on the adjacent structures and is familiar to all of us, affecting particularly the ovaries, bladder, rectum, pelvic blood vessels and ureters.

Under degenerative changes we find literature profuse in case reports of edema, myxomatous degeneration, necrosis, suppuration, cystic degeneration, calcification and malignant degeneration. In a report by Deaver of a series of 513 myomas, 111 showed hyaline degeneration, hemorrhagic, necrotic or calcareous degeneration; a combination of these were found in twenty-six others. Pus tubes were noted fourteen times. Eight fibroids were associated with cancer.

General or constitutional symptoms represent the change in distant organs traceable to the effect of the tumor and deal particularly with the circulatory system and kidneys.

Anemia with its accompanying changes we noted. In addition there is a distinct degenerative change in the heart and blood vessels. This is most emphatically shown by a series of cases by Baldy. Of 3,413 operations there were sixteen postoperative deaths directly due to circulatory disturbances. Of this total 366 cases were uterine fibroids, and in this class of cases there were thirteen of the sixteen deaths.

In addition to this train of symptoms, both general and local, the majority of fibroid cases on operation show some of the following complications:

A—In the uterus: (1) thickening of the endometrium; (2) distortion of the uterine cavity; (3) displacement of the uterus.

B—In the adjacent structures: (1) salpingitis, hydrosalpinx and pyosalpinx; (2) pressure on adjacent structures.

C—In distant organs: (1) appendicitis; (2) gallbladder disease.

This matter is well summed up by Arthur Stein of New York. In a series of 120 cases he encountered complications as follows: (1) single or double pyosalpinx, twenty-six; (2) acute or subacute appendicitis, eighteen; (3) large ovarian cysts, seventeen; (4) ectopic pregnancy, one; (5) hydrosalpinx, twelve; (6) adhesions, eight; (7) gallstones, two. These complications occurred singly or combined in sixty-one cases, 50.8 per cent.—a high rate as compared to Tracy's report of 33 per cent. In this series of

cases there were four deaths after operation, 3.3 per cent.

I have dwelt at some length on this phase of the subject because I believe that an uncomplicated fibroid is less common than we have been led to believe, and I am thoroughly convinced that the presence or absence of complications or degenerative changes is the large factor to be considered in the determination of the line of treatment to pursue.

As to the use of radium in these cases John G. Clark of Philadelphia says: "We use radium only in very light dosage in the treatment of young women in whom the tumor is not palpable, but who are suffering from a depleting flow at the periods. The flow diminishes as a rule to within normal limits, but occasionally a permanent amenorrhea results. This latter crisis can and will surely be precipitated by too large dosage. Further, we do not employ it, and thus far have no valid reason for discarding an operation where the tumor is massive and by its presence is handicapping the functions of adjacent organs by pressure. Large tumors are much more likely to be accompanied by inflammatory lesions and there is always an element of doubt in the diagnosis. In such cases we believe we serve the best professional end in advising an abdominal operation. In young women in whom myomectomy is possible we advise operation, for in these cases the uterus may be restored to normal and the ovaries are preserved.

Summary of cases in which radium is advised: 1. In large dosage, 50 mg. for twenty-four hours in women with hemorrhage or menorrhagia from myoma in cases over 40 years of age. In such cases we expect to bring on the menopause, and in practically all we are successful. 2. In smaller dosage, 25 to 50 mg. three to eight hours in women under 40.

We do not employ radium: (1) when the tumors are larger than a three or five months' pregnancy; (2) in young women where tumor may be removed by myomectomy.

Kelly of Baltimore goes more into detail as to his results in a series of 210 cases and gives the following summary:

(1) Control of hemorrhage and checking of menses; (2) shrinkage of the tumors; (3) in some cases disappearance of the tumor; (4) in some cases even after two years a return of menstruation either normal or scanty.

Twenty cases in this series could not have been operated without danger because of systemic complications. At the same time 45 cases presented which were treated surgically because they were not fit for radium."

Thus we see that the men most familiar with the use of radium in these cases may at most be said to be very conservative and the reasons for this are best found in the summary of Stein of New York.

"1. It is impossible to determine whether the growth to be dealt with is a benign or malignant tumor.

"2. My statistics show that about 50 per cent. of all myoma cases are complicated by other pathologic conditions.

"3. In young women who have not reached the menopause the radiation is almost certain to destroy the function of the ovaries.

"4. The continuous application of the rays is likely to have a deleterious effect on the intestinal mucosa.

"5. Various statistics show that the mortality from operation is not above 1.6 per cent."

This latter fact, counterbalanced by the number of cases that come to surgery after the application of roentgen ray or radium for the removal of tumor itself, with some complication of skin burns, vesicovaginal and vesicorectal fistulae, pales into insignificance in the face of almost constant, prompt and complete cure after operation.

May we not therefore conclude, with the best interests of our patients always in mind, that the cases of uterine fibroid to be treated by means other than surgery are indeed a very small minority and only those that are unfit for surgery.

CONSERVATIVE SURGERY *

O. O. MELTON, M.D.
HAMMOND, IND.

In preparing this paper, I have selected the subject "Conservative Surgery," realizing that the subject is an endless one and, further, that the interpretation of the word "conservative" as applied to surgery has been made to cover procedures and plans of treatment which, in the light of further knowledge, have been shown to be anything but conservative.

Dr. Wm. Ferguson stated in 1852 that the grand object of surgery, properly so called, may be defined to be "the preservation of the greatest portion of the body at the smallest sacrifice." Parham, in an address delivered before the Southern Surgical and Gynecological Association, said: "The surgeon who respects the power of Nature will do only the least needed to set

Nature right. He will become really a conservative surgeon, his first object being to save life, his second to leave his patient as nearly as possible in the image in which he was created. He will do as much as may be required, but no more. He will be as radical as may be required, but not reckless, and hence conservative. He will take advantage of the factors of safety of the human machine, as Meltzer has pointed out, and will allow the therapeutics of self-repair to have as far as possible command of the situation." In these two statements we find, I think, the proper interpretation of conservative surgery.

1. The safety afforded operative measures by the perfected technic evolved from bacteriologic studies, combined with the advantage of satisfactory anesthesia, has led in some degree to the development of the operative side of surgery, with which care in the diagnosis did not at first keep pace. It was during this stage of surgery that enthusiasm carried the art far beyond the lines of conservatism; needless operations were done, useless, often harmful, removals were made; lives were sacrificed that should have been saved; health, with peace of mind and body, was destroyed when it should have been conserved. Coe, in 1904, said: "All of us who have served an apprenticeship in gynecologic clinics have arrived at the conclusion there is a wide difference between the word 'cured' on a patient's discharge slip and her condition a few months or years after the operation."

2. Accumulated experience in operative results, with more satisfactory means of arriving at a fairly accurate diagnosis, have shown the way to conservatism, the way to prolong our patient's life in health and comfort, with least possible damage to remaining structure. It has been stated that the greatest error in conservatism at the present time is in the failure to make an early and accurate diagnosis, since this offers the only opportunity to attack disease without complications, while it is limited in extent, most often localized in character, and presents the possibility of removal or cure with the least possible trauma. Certain it is that the cystoscope, urethral catheter, microscope, roentgen ray, vascular tension apparatus, stomach tube, laryngoscope, serum and toxin tests, and other diagnostic methods, taken in conjunction with the accumulated experience of our own and preceding generations, increase our perspective of disease and place us in a position to recognize early lesions, capable of being treated conservatively with safety and precision. Merited criti-

* Read before the Indianapolis Session of the Indiana State Medical Association, September, 1919.

cism will be ours in proportion to our failure to apply the recognized aids leading to a diagnosis which permits our patients to regain their health with the least possible damage.

Dr. Wm. Howat, in his Presidential Address delivered at the annual session of the Indiana State Medical Association at Indianapolis, Oct. 10, 1912, said: "To the members of the medical profession the spirit of the times has extended in various ways; but unfortunately too many are obsessed with the idea that anything may be acquired for a price, and, bending the knee to Baal, have sworn fealty to the god of wealth, and exchanged duty and personal usefulness, and privilege of service for a part in the narrow commercialism filling the field of vision of so many of mankind. The light in which the public at large has come to view the many-faced medical profession, its imitators and substitutes, is worthy of earnest thought on our part." It is well to bear in mind that these are contingencies that pertain to all surgical cases.

Maurice Richardson said in 1905: "With the advance of modern surgery, many of the horrors of the old days have been obviated it is true, and the occurrence of others has been rendered infrequent, but there still remains in all surgical cases possibilities of disaster which the longest experience and the greatest care cannot prevent; and we must not, in any case even the simplest, forget these possibilities. With the rare and unavoidable disaster and with the common and avoidable any of which, through errors in human judgment, may unexpectedly occur—the modern surgeon, who has under his care so many cases, is indeed fortunate if he has not at every moment some disturbing case and in every year some deplorable calamity. The surgeon reviewing his years of active practice cannot but be impressed by the responsibilities of his profession. He recalls the frequent misgivings with which, on the strength of his fallible opinion, he has advised and performed operations; the excitement of a critical operation and the deep breath of thankfulness when he has succeeded in averting some grave complication; his forebodings, so frequently instinctive, of impending disaster, and the sinking of the heart as his forebodings become realities, the often useless struggle against overwhelming odds, the distressful death, the severe self-criticism and biting regrets."

The conquests of surgery have been more limited in malignant growths than any other fields. While the profession has been able to determine the cause and institute prophylactic measures in many of the serious disease problems, it has made but little advance in the causa-

tion of malignant tumor. Out of the mass of clinical, pathological and experimental material the following facts have been gleaned: First, that such growths are in the beginning always local, consequently at this stage are curable by thorough removal. Second, that they spread by contiguity, blood and lymph stream metastasis, rapidly becoming incurable by reason of their inaccessibility. Conservatism in their treatment means early recognition and radical removal. It seems to the writer that the larger burden of cancer rests with the diagnostician. All breast tumors should be regarded as malignant or soon to become so; if the case comes to radical operation before perceptible enlargement of the axillary lymphatics, 80 per cent. may be expected to remain well. Cancer of the uterus may for our purpose be divided into that of the body and that of the cervix; if that of the body be subjected to early hysterectomy a fair proportion do not show extension or recurrence, while that of the cervix, owing to the lymphatic distribution, is probably the most intractable of all carcinomas; only when radically treated in its incipency can we hope for a successful result. Cancer of the stomach, for a long time held to be necessarily fatal, is amenable to surgical removal if recognized early; but one must remember that the symptoms as given in any but the most recent text-books are not to be relied on for diagnosis, since they represent terminal symptoms; consequently a diagnosis based on their findings will be made too late to permit of efficient surgical service being rendered. We can often make the remaining days of such patients more comfortable by means of a gastro-enterostomy or some palliative measure, but in order to save life an early diagnosis is imperative. To wait the development of probable malignant tumor in any locality until an easy diagnosis is assured is but to throw away the opportunity for permanent relief; such delay is not conservatism, but negligence.

Next to malignancy, probably the darkest chapter in surgery is that of intestinal obstruction, the mortality being variously estimated at from 65 to 85 per cent. A small part of this exceedingly high rate is legitimate; the greater part of it, however, represents the mortality of delay. The relief of pain with morphia and the ineffectual administration of purgatives, does not constitute conservative, but on the contrary, reckless treatment since by it the patient is lulled into a false sense of security, only to awaken when the gut is so damaged that it is beyond repair. Opiates should be administered very sparingly, if at all, previous to making a diagnosis, reliance being placed on purgatives,

stomach and colon tube; if these prove ineffectual, further delay should be avoided and immediate operation performed. The responsibility assumed in advising an operation under such circumstances is not great as it offers the only possible relief. It has been aptly compared to the responsibility of jumping into the water to save a drowning person; on the contrary, the responsibility for delaying such operation, or an operation in the early stage of malignancy, is heavy and, in the words of Richardson, must bring severe self-criticism and biting regret.

The conservative management of appendicitis has received much attention in recent years and given rise to a voluminous and somewhat bewildering literature on the subject. The earlier dictum to operate as soon as the diagnosis is made, has been shown to be fallacious since the diagnosis is not always made at a time favorable for operation; on the contrary, the rest treatment popularly known as the Ochsner method and improperly interpreted and applied is not suitable to all cases since gangrene, perforation, and abscess formation may occur while awaiting the subsidence of the attack. In advising our patients suffering with appendicitis, it is well to bear in mind the sequence of pathologic events and it will at once be apparent that it requires successful treatment and accurate judgment for the different phases of the disease. Normally the appendix is nonadherent, freely movable, being attached by its base and mesentery to the colon; in the early stage the inflammatory process is limited strictly to this organ, consequently its removal at this time means a conservative and practically safe operation; as the process advances, the neighboring peritoneum and viscera become involved by contact infection or perforation. If the inflammatory process has been too rapid to permit of Nature protecting the cavity by peri-appendicular adhesions, a diffuse suppurative peritonitis ensues from which the only possible chance of escape is early recognition and the institution of the treatment suggested by Murphy—drainage in a favorable position with a continuous proctoclysis. This treatment is an excellent example of conservative surgery, doing as little damage as possible, merely making a puncture for drainage, and reducing the mortality by leaps and bounds from 80 to 90 per cent. to 1 to 2 per cent. At the same time the necessity for it is an instance of delay; if the inflammatory process has not been so rapid the infection will have extended beyond the appendix, involving the omentum, parietes and intestinal coils, while Nature will have more or less successfully limited its spread by a wall of protecting adhesions.

Operation at this stage removes the appendix, it is true, but the appendix constitutes only a small part of the disease; the manipulations incident to its removal destroy protecting adhesions and liberate virulent toxins upon fresh raw surfaces which only too often show a highly absorbent power; it is just at this stage that the rest plan suggested by Ochsner is indicated; keep the patient quiet, restrict peristalsis, no food and but little drink, empty colon by means of enemas and permit Nature's opsonins and phagocytes to effectually wall off or remove the peri-appendicular infection, when the operation again assumes a comparatively safe aspect since the infection is once more limited to the appendix alone. When abscess is present, evacuation and drainage while not devoid of danger, is safer than trusting to rupture and drainage into the gut. Viewing the pathologic process from the time of its limitation to the appendix to its spread to other viscera, entailing the inflicting of damaging adhesions, a general peritonitis, or the presence of pus necessitating prolonged drainage with consequent weakening and hernia of the abdominal wall, the only possible conclusion is that conservatism consists in the removal of the appendix at a time when the disease is limited thereto and which permits of efficient closure of the abdominal wall without drainage. It is true that in the majority of instances patients may pass through attacks of appendicitis without rupture, pus formation, and oftentimes without the formation of disabling adhesions; but it is not within the power of man to say in the beginning of a given cases what course it will pursue, favorable or unfavorable. If the offending organ is removed at once we will have but few regrets; if we wait on the set of symptoms indicating a spread of the infection beyond the confines of the appendix, our patient's life is placed in greater jeopardy and the probability of recovery without more or less disabling defect is greatly lessened. Patients who have passed through an attack without operation and who continue to have pain in the appendicular region upon exertion or upon pressure should be subjected to operation without waiting the almost sure onset of a second attack. The operation in so-called catarrhal cases and interval patients who have had but one or two attacks and who are perfectly comfortable is purely and simply one of choice, the responsibility for which may be left entirely on the patient; when the attacks, even though mild in type, continue to recur the line of safety lies in removal.

Owing to the length of this subject, the time will not admit of the consideration of conservative management of gallbladder and biliary

passage lesions, ectopic gestation, ovarian and uterine disease, and lacerations of the perineum and cervix. If these rather rambling remarks suggest one idea more than another, it is the importance of an early accurate diagnosis, and the folly and danger of delay in acute abdominal disturbances.

3. It must be granted in conclusion that the diagnosis is not always easily made, often presenting such difficulties as to tax the skill of the most experienced. When we have availed ourselves of all the known methods of arriving at an accurate diagnosis, striving to perfect and mature our judgment as our experience, ability and opportunities permit, endeavoring to aid our patient with a minimum damage, having the courage, as Sir James Paget expressed it, to do but little when doing more would mean harm, having the courage to be radical when the occasion demands it, always aiming to give our patients the best results, which they have a right to demand, we will attain the ideal of conservatism, the preservation of the greatest portion of the body at the least possible sacrifice.

DISCUSSION ON PAPERS OF DRs. HAYWOOD,
PADGETT AND MELTON

DR. T. C. KENNEDY (Indianapolis): I think it was a good idea to have Dr. Melton's paper follow that of Dr. Padgett. It is a wise surgeon who knows not only when to operate, but when not to operate.

My discussion is based on Dr. Padgett's abstract, which says "It does nothing to the size of the tumor." I do not know why this is in the abstract and not in the paper.

At the last meeting of the American Medical Association a paper on this subject was presented by Stein of New York. One of the discussants was frank enough to say: "I do not know anything about radium for fibroids, my experience being principally on the surgical side." But he was not satisfied to stop there but went on to give his opinion as to what class of cases might be radiumized. He gave it as his opinion that radium should be limited to cases "which are inoperable when the heart is so bad that you do not care to take a chance, or the patient is so anemic that you want to merely tide the patient over and operate later." I want to offer this suggestion to the surgeon. If you want to tide the patient over and operate later, don't have her radiumized, for there is only about one chance in one hundred that she will ever need to be operated for fibroid after being radiumized by a competent man.

I would like to have the essayist tell us whether it is from personal experience or from the literature that he has conceived the idea that radium does not reduce the size of the tumor. After reading the abstract of his paper I looked

up the literature on this question and find it is so voluminous that I will be able to use only a small part of it in this discussion. If any of you desire to read the articles in full I will gladly cite you to them.

Abbe, in a paper entitled "Uterine Fibroids, Menorrhagia and Radium," says: "It is a pleasure to add an agent so simple and powerful as radium for the control of this serious malady. But best of all is the demonstrated greater effect of its reducing power and frequently of the tumor itself. I regard it as the treatment of choice in all cases except pedunculated fibroids."

Ransohoff thinks that "except in unusual cases radium or roentgen ray should be the treatment of choice in uterine fibroid and essential in uterine hemorrhage."

Cullen believes that "radium and roentgen rays are without a doubt destined to play a large rôle in the treatment of fibroids."

Kelly, in a report of 210 cases treated by radium, says: "Taking an average of all operations throughout the country as they are handled by the skilled and unskilled, the risk to life and health is still considerable even in simple cases; it is greatly increased in infected sloughing tumors, and somewhat enhanced where the hemoglobin is below 30 per cent. In both skilled and unskilled hands there is the ever present dread of cardiac embolism, often occurring about the time the patient is superintending the packing of her grip, happy in the anticipation of the home welcome; truly a tragic ending. With skill or without it, in lesser or in greater degree, hysterectomy is followed in a considerable number of cases by a protracted convalescence and untoward sequelae in the shape of postoperative suppurations, adhesions, hematomata, infections of the cervical stump, ventral hernias, and prolapse of the vaginal vault.

"Even where there is no complication following the hysterectomy there still remains the disagreeable and painful hospital experience, while it is rare for the patient to be able to take up her routine burdens of life under several months. This coupled with the fact, unavoidable indictment, that it is after all a mutilating operation, tends to make welcome some better substitute procedure.

"I have operated upon about two thousand women. If then, I have radically changed my viewpoint and come before you with another nonsurgical method of treatment, you will realize that I must at least be under the conviction that I have discovered a better and safer course.

"Beginning back in the fifties of the last century, our predecessors, at infinite loss of life and pains, built up the operation of hysteromyomectomy, by which so many lives have since been saved and to which also many have been sacrificed. As long as it can be shown that an operation in a given series of cases will not only give better health, but also save lives, we

can contemplate with mingled regret and satisfaction the necessary mutilations. This attitude of mind, however, is now no longer tenable, for now that we have a safer, simple procedure at our disposal, every death in the fibroid group becomes an indictment."

Dr. Stacy of the Mayo Clinic says: "Radium was first used in the Mayo Clinic in 1915 in the treatment of menorrhagia of the menopause, in cases which presented no gross pelvic lesion, and in those presenting a fibroid with counter-indication to operation. Since then the type of cases treated have been increased and now it is considered the treatment of choice in all cases of menorrhagia of the menopause in which the presence of carcinoma is definitely excluded, either by history or diagnostic curettement, and in those cases not presenting a large, soft myoma which is apt later to undergo degeneration.

"However, we have not entirely replaced myomectomy with radium in the patients between the ages of 30 and 40 years. In most cases of myoma during the child-bearing period myomectomy is the treatment of choice."

The essayist also says that unless given in small doses and with care it brings on an early and permanent menopause. It must be admitted that radium must always be used with care, but it is readily controllable in skilled hands. It is also wise to use care in all surgical work, and myomectomy should never be performed except by a skilful surgeon.

Radium has produced a permanent menopause, and so has surgery, but it does not follow necessarily that an early menopause must always follow the application of radium in these cases. Cases have been observed by Janeway and Schmidt and others in which radium had produced complete retrogression of the fibroid and later the patients became pregnant and gave birth to normal, healthy children. Many authorities claim that sterility is the cause of the fibroid, others claim that the fibroid causes sterility.

Ewing, in a recent work on "Neoplastic Diseases," says: "Sterility has long been held to be a factor in the etiology of myoma, and Veit concludes that abnormal excitation and congestion of the organ without conception may excite tumor growth. It is highly probable that myoma favors sterility from the mechanical and inflammatory effects of the tumor."

The essayist has brought up a very interesting topic for discussion and while the workers with radium have been convinced of the efficacy of radium in the treatment of fibroids, it will be only a short time until the most skeptical also will be convinced of that fact.

DR. EDMUND D. CLARK (Indianapolis): Of course a paper on uterine fibroids is very interesting to me. I believe there is a middle ground in such cases. I do not by any means believe that all fibroids should be treated by radium or

the roentgen ray, neither do I believe they should all be treated by surgery. There is a considerable group of fibroids that can be successfully treated by the roentgen ray or radium. Of course it is taken for granted that in roentgen ray or radium treatment pus tubes, appendicitis and gallbladder disease are to be eliminated. In other words, we are simply treating the fibroid.

I believe also that the treatment should be limited to the small fibroids. We have not had experience enough to know what effect it would have on large tumors, but it is my judgment that in those cases the tumors should be removed. There are a certain number of fibroids that can be taken out of the uterus by surgery and the uterus left practically normal, normal enough to enable the woman to bear a child. Many of us have had such an experience.

Dr. Cole has treated a number of fibroid cases for me with the roentgen ray, fibroids that I felt were amenable to such treatment, and with one exception has treated them successfully. That one exception was a case which he treated only once. The woman objected to the nausea that followed the treatment and I did a hysterectomy with a good result.

It cannot be emphasized too strongly that the diagnosis should be carefully made. Scrapings should be taken, an inspection of the cervix should be made to see that there is no ulceration or anything that has the appearance of malignancy. Where you have a suitable case, that is, a tumor of medium size (not greater than a three or four months' pregnancy), a tumor that is not soft, that is in your judgment not malignant, that is without complications, I believe radium or roentgen ray can be used successfully, and in my practice I refer all such cases to that treatment.

The next paper on "Conservative Surgery" is also interesting to me. It brings up some questions that have been near my heart during the past year. I feel that we cannot too strongly emphasize the need of immediate surgery in acute conditions in the abdomen. I have had more pus appendices to treat in the last six months than I have had in any other six months of my experience, and most of these cases had been treated medically for a considerable length of time. I do not believe that any man is skilful enough to know just what any case of appendicitis is going to do, and my rule is to operate when you have made your diagnosis—operate at once.

The Ochsner treatment referred to is, as I understand it, for those cases of infection that are so full of risk that complete rest of the intestinal tract by morphia and the withdrawal of food and drink should be tried instead of surgery. But the Ochsner treatment has been used for all forms of appendicitis and Ochsner did not intend his method to be used in all cases. When you have a case of appendicitis the earlier

you get the appendix out the better your results will be. Practically the same is true of gallbladder disease. When you have a diseased gallbladder, when you are sure of your diagnosis, the quicker you get it out the better off your patient will be.

There is no one more favorable to conservative surgery than I. I do not believe in mutilating tissues, or in doing operations because you have the skill to do them; but I believe in surgery more every day of my life, and I believe the conservative surgeon is the man who takes out an appendix promptly, the man who removes a gallbladder immediately after he has made his diagnosis; the man who removes tumor from the breast as soon as he finds it, not telling the patient "Go home and make yourself comfortable and wait until this tumor gives you trouble." When it gives trouble the day for cure has passed.

I agree with practically everything Dr. Baker has said. I am removing the uterus more often as time goes on in cases of pus tubes. It was formerly my practice to save the uterus unless it showed gross evidence of disease. But I am having the same difficulty he has had and other men have had in treating this organ, and I believe it is the wiser policy in the majority of instances to remove the uterus with the tubes and conserve the ovaries. It is very rarely that I remove both ovaries.

DR. J. R. EASTMAN (Indianapolis): Conservatism, I take it, means to conserve. To conserve life is important, and I am sure that we conserve life by taking out the infected appendix promptly upon diagnosis. If there is anything a surgeon dreads it is a case of appendicitis from a conservative practicing physician. When I see one of them coming to my place I feel like going out a back window, because I know he has probably physicked this patient with salts. One of the most important things that Ochsner ever said was that in appendicitis purgation spells perforation. It is very wrong to give drastic cathartics, particularly the salines, to acute appendicitis cases. I am sure from my own observations that it very often means perforation and death.

It is too bad that at this time, in the year 1919, we must again review the Ochsner treatment of appendicitis which has been so generally misunderstood that probably it would have been better if Ochsner had never said anything about it. Up to the fourth day Dr. Ochsner, Dr. Murphy and Dr. Deaver are in agreement. Nearly all surgeons everywhere are in agreement up to the fourth day, that is, that up to the fourth day appendicitis should be operated on the spot. But after the fourth day Dr. Deaver and Dr. Ochsner disagree. After the fourth day Dr. J. B. Murphy was accustomed still to operate these cases upon diagnosis, but Dr. Ochsner took the position then that whatever danger of perfora-

tion had existed was probably now past and that it was then the part of wisdom and prudence to permit the infection to abate, to allow the case to go on to the safe interval, when the appendix could be taken out with practically no risk. Therefore, the Ochsner treatment of conservation does not mean that a case of appendicitis shall not be operated at all; it means that up to the end of the fourth day it should be operated on diagnosis; after that time if the patient is getting better he should be permitted to get as well as possible, to go to the interval. If the patient is getting worse, however, if the white cell count is rising, if the symptoms generally are growing more serious, then of course an effort should be made to save the patient by the removal of the appendix. But if the infection is abating it should be allowed to do so as completely as possible and the operation done in the interval. It is a shame that physicians persistently misunderstand the Ochsner method of treating appendicitis to mean a nonoperative method of treatment.

DR. H. K. BONN (Indianapolis): In this connection it may be said of conservatism, as of liberty, "How many crimes have been committed in thy name!" Almost every advance in surgery has been made against the opposition of a false conservatism. We must always attribute to the conservative one in surgery good intentions, but afterwards must often admit misdirection and poor judgment.

What is conservative medicine and surgery? He who gives some mystic concoction to his patient with cholecystitis and recovers soap balls in the stools thinks he has caused the painless passage of gallstones. He thinks he has cured the patient without an operation and therefore has practiced a conservative act. So the word may say one thing and mean another. We must not tie ourselves to the word. Dr. Melton has already made this point clear and has very nicely shown us the proper use of the word.

To be more explicit, let me speak of conservative surgery, so called, as applied to specific fields. For years surgery of the female pelvic organs has been strongly influenced by the teaching of some who have advocated an extreme conservatism. This has led to much incomplete surgery, bad results and repeated operations. Women have come to say that "If you have one operation you always have to have another."

A fair part of every surgeon's work is the removal of diseased organs from the female pelvis which some other surgeon has not removed at a previous operation. So-called "conservative surgery" in the female pelvis has been a failure. For every child born with patched up organs, fifty women have been reoperated or are suffering sufficiently to justify reoperation.

In another important field a too conservative course is usually followed. I refer to surgery of

the biliary system. Many gall bladders are being drained which should be removed. Acute cholecystitis should be treated like appendicitis. Operation should be done while the patient is in colic and the disease extirpated by a clean cholecystectomy. Too often the gallbladder is drained when it should be removed and the common duct opened, explored and drained. It has been found that stones are present in the common duct in 10 per cent. of all cases where they are found in the gallbladder, yet how often do we see the gallbladder emptied of stones and the common duct not examined at all or only an inefficient palpation made.

It seems to me that in these two fields especially we should have less so-called conservative surgery and more complete work.

DR. ALBERT M. COLE (Indianapolis): I have been hoping that we might have a good discussion of the surgical versus the nonsurgical treatment of fibroids. The merits of nonsurgical treatment have been so well brought out by Dr. Kennedy that I can say but little more. Personally, I have treated a considerable number of uterine fibroids with the roentgen ray, and they have all done remarkably well. I have had tumors the size of the two fists that have disappeared after a few treatments and the patients have gotten well and remained well so far as I know. When we contrast this with the danger from surgical operation (although it may be slight in the hands of a deft surgeon) and with the complications that very often follow in the form of adhesions, hernias, etc., I believe that the conservative physician will consider treatment by radium and the roentgen ray in a good percentage of his cases.

There are always cases of uterine fibroids that demand surgery. If you are suspicious of carcinoma, or if you are sure you have other complications such as pus tubes, then there is no question but that surgery is demanded; but in the uncomplicated cases which certainly comprise a very large percentage of fibroids, the patient should be given the choice of radium or the roentgen ray.

Some surgeons have referred to the danger of degenerative changes following the use of radium or the roentgen ray. In other words, they claim that the remnant of the fibroid (if there is a remnant) may degenerate into cancer. There have been no reports to this effect to my knowledge. Statistics from Germany comprising several thousand cases have all failed to show any such complication; and Pfahler's cases in this country, over one hundred of them, and all followed very closely, have failed to show any carcinomatous complications following. I do not feel that this is a real danger. There is one objection to the use of radium and the roentgen ray which has not been touched upon, and this is the undesirability of bringing about the menopause in young women, which will

sometimes occur. In many cases it might be desirable to avoid this. Pfahler has recently published the report of a case in which he was able, by directing the roentgen ray immediately through the center of the pelvis and avoiding striking the ovaries, to cure a fibroid situated on the posterior wall of the uterus, and at the same time preserve the ovaries so that the patient's menstruation was not affected and she afterwards became pregnant. I believe that with such an improvement in our technic we will be able to avoid any effects upon the ovaries in many cases where it is desirable not to bring about the menopause. This case of Pfahler's also disproved the old theory that the entire effect from radium and the roentgen ray came from their influence on the ovary.

Many surgeons are seeing the advantages of radium and the roentgen ray in uterine fibroids in uncomplicated cases. Many of these surgeons are men of distinction; even those who opposed these agents are advising their use in inoperable cases. This method of treatment has passed the experimental stage and must take its place as a legitimate and highly efficient therapeutic agent in uterine fibroids.

DR. O. G. PFAFF (Indianapolis): I confess I am not able to get at the root of the question. They say if you have tubal disease, or a large tumor, or degeneration that makes radical removal necessary, that radium and roentgen ray are to be excluded. In other words, you use the roentgen ray or radium on small fibroids. The small fibroids are found in women between thirty and forty as a rule, and the risk of sterilization is to be considered. That class of fibroids can be removed surgically at one sitting under gas with very little discomfort and almost without mortality. I do not know when I have had a death from the removal of a fibroid tumor that was not complicated by pus tubes. A clean-cut small fibroid tumor without complications can be removed in nearly 100 per cent. of cases without a death. I do not think you will have over 1 per cent. mortality in such cases.

Now large tumors are not to be thought of in connection with radium or roentgen ray treatment. What does it do? It does control hemorrhage. It shrinks the tumor to a certain extent; whether it changes the quality is an open question. There are other reasons. The unknown potentiality of the tumor to develop malignancy is there. How can you tell that the mass is or is not cancer? By operating and cutting it open. You cannot tell it in any other way. You may guess at it, but you cannot tell. Over and over again I have taken out medium sized and large tumors that seemed to be simple fibroids and found they were malignancies, and no human being can tell that before operation.

What does radium do? In so far as malignancy is concerned it has not been proven that

it cures permanently. I had one particular case, a man who had a small tumor the size of a hickory nut growing in the rectum. I recommended that he go to Baltimore. There it was diagnosed as cancer of the rectum and it was stated that an operation at that stage would probably result in a cure. But they recommended that he go to New York to see a radium expert and learn what he would have to say about radium, and I went with him. This gentleman treated him and I got a few letters about the patient occasionally; the last one I received stated that he was making good progress, that the tumor had almost disappeared and he was doing well. It was not six weeks from that time when the man was operated on in Boston in an emergency for obstruction of the bowels. A few months later they held a postmortem and found an extensive pelvic cancer involving the bowels and some other organs, especially the liver.

I cannot refrain from speaking of the question of appendicitis at this time. Ten years ago we thought we knew all about appendicitis; some of us think we do yet. We were charged then with being radical; and are so charged today. But as Morris says in his little book, "Remember that the relapse is sure to occur; beware of the failure to recover." I think we have come to the period of relapse.

I heard Ochsner speak in Saratoga and again in Washington Deaver and Murphy discussed his position. I shall never forget Murphy saying, "We are not so far apart after all. There is no conflict at all as to what should be done in the early cases of appendicitis. There is no difference as regards the later cases up to the point almost of dissolution." He said, "The only difference of opinion in the world is as to what is best to do with those cases that are moribund, where death is impending, where you say this man will die under an anesthetic and a local will not be sufficient." Ochsner felt that a large percentage of these cases could be saved by holding them over for awhile, that more of them would get well than to operate on them at that time. Deaver, on the other hand, took the other side, and I believe he was right. I believe when a man is so near death that he cannot take an anesthetic, a clean knife thrust would be better than waiting. We do not know anything at all about what is going on in the appendix. Nobody knows or can have in the first day or two the remotest knowledge of what will occur. I believe we will save the greatest number of lives if we operate every single case that can stand an anesthetic at once upon diagnosis, the earlier the better.

DR. J. R. EASTMAN: Dr. Pfaff has misunderstood me. It was not Dr. Murphy who was accustomed to practice surgery of the appendix after the fourth day, but Dr. Ochsner. Dr. Murphy stated his position very clearly at a meeting

of the Illinois State Medical Society, and it was precisely what I have said. I have his figure before me as he stood there at that meeting. I remember his words precisely. He said: "Dr. Ochsner and I are in perfect agreement up to the fourth day. After that time I believe in operating on them unless they are moribund, and after that period Dr. Ochsner believes it can be done with safety by carrying the patient over to the interval."

DR. PFAFF: The point I wanted to make was that no one can say certainly that the fourth day is the critical day. One man may be in condition on the third day and another on the fifth. It is the condition of the patient, not the number of days. I think Murphy and Ochsner were wrong about that.

DR. HUGO O. PANTZER (Indianapolis): The divergent views here expressed as to diagnosis and treatment simply emphasize for me one fact, namely, that we have not yet such scientific data which enables us to make concordant diagnosis and treatment. I think the invariable use of radium or the roentgen ray for fibroids is not justified. In the first place, the low mortality of operation for fibroids, as stated by Dr. Pfaff, being about 1 per cent., makes this procedure relatively safe; and secondly, it leaves the parts in quite more salutary condition than is the effect upon them of radium or roentgen ray treatment.

I have on my office desk this morning a report from a patient I operated two years ago for eight fibroid tumors of the uterus, resembling in form a five to six months' pregnancy, and for constricting the ileocecal membranes. The tumors were enucleated through incisions carefully sewed. The patient, forty years old, single, thus far in life had gone by rather a pathetic course. The oldest of seven children when her father died early, she had assumed the burden of provider for the family, and besides assisted her mother in the duties of the household. This was uncomplainingly done notwithstanding great debility from chronic intestinal and tonsillar toxemia, and in late years of uterine hemorrhages. Besides my operation, the tonsils were removed. Within a few months she had made a marvelous recovery in her general health, and then was induced to take a trip away from home, perhaps her first vacation in her life. Upon this occasion she found her mate for life and as a natural result, the card on my desk referred to above, announced a fine boy, mother and son doing well. Previously, when I had learned of the prospect of this event, I wrote her physician in Minnesota advising her sojourn in a hospital during labor, thinking of the possibility of uterine rupture during labor and the need for a cesarean section. Happily, this fear was for naught.

In conclusion let me say: Take from this world the sum total of bliss from this and all

similar cases, as would be taken away by the destructive effects on organs by radium and the roentgen ray in such cases, and there would be an appreciable loss of mundane happiness.

DR. W. D. GATCH (Indianapolis): The question of what fibroids should be operated on and what fibroids should be treated by radium or the roentgen ray is, as Dr. Clark pointed out, a matter of judgment. I do not believe we can lay down a rule that every fibroid should be treated by radium, or that every one should be treated surgically. In regard to a certain class of cases I have no doubt that roentgen ray or radium is the best treatment. I wish to report one case.

A woman of about forty had a tumor almost the size of a full-term pregnancy. She had had continuous frightful hemorrhages for several months, so that the hemoglobin was 30 per cent. She had a very low renal function test, she had edema of the ankles and a myocardial lesion. When I first saw her I think even the most enthusiastic surgeon would have been doubtful about operation. She was the first patient I ever referred for roentgen ray treatment. Dr. Cole treated her, giving her a mild treatment the first time without much result. She came back and he gave her a very vigorous treatment. This caused rather severe nausea and vomiting, but that seemed insignificant when compared with the benefit she was getting. I examined her four months after this single intensive treatment and found that the enormous mass of fibroids had entirely disappeared. She is well today. I have absolutely no doubt that this woman's life was saved by roentgen ray treatment.

It seems to me that the large tumors are better treated (if you decide the case is one for radiation) by roentgen ray, and the small ones by radium, because with the roentgen ray you can get a wider exposure to cross-fire.

In regard to the mortality of this operation for fibroids, it seems to me there are two factors beyond our control which are bound to cause a considerable mortality. These are, possible sepsis in degenerated submucous fibroids, and embolism. Fibroids are frequently associated with enormous varicoceles of the broad ligaments which make embolism a very real danger. I believe that under the best of conditions the mortality from embolism will be from 2 to even 5 per cent.

We can cure most of these patients by the roentgen ray or radium, and I am convinced we ought to do it. Radiation in a large percentage of cases gives better results than we can hope to obtain by surgery.

DR. E. E. PADGETT (Indianapolis): I did not say that roentgen ray and radium do not do any good. We all know they do; but the cases are difficult to pick out. If we have any way of

being certain it is all right to try these treatments. As to radium, I have no knowledge of it personally; I have none in my office and do not expect to have. I am only quoting men who do this work, and I quoted their statistics, not their comments, and these show that the use of radium is not entirely without danger even in the hands of men who are experts. Of course I think the same thing may be said of radium and roentgen ray as of surgery, that in the hands of competent men the mortality is lower.

The important thing to determine is whether your tumor is complicated or degenerative, and if there is no degeneration going on or no complications present you can use the roentgen ray with good results. However, one is never so sure as when he has examined the interior of the abdomen surgically.

J. F. SCHAMBERG, Philadelphia, in *The Journal of the American Medical Association*, Dec. 20, 1919, discusses the comparative merits of arsphenamin and neoarsphenamin in the treatment of syphilis in the light of recent investigations. Schamberg states that during the war nearly all the treatment of syphilis along the fighting line was done with concentrated injections of neoarsphenamin, the preparation of which is less complicated than that of arsphenamin itself, as it can be prepared much more rapidly and is more easily injected with a small needle. Schamberg does not believe, however, that it is as active in the curative treatment, and it might be admitted that twice as much neoarsphenamin as arsphenamin must be given to achieve the same results. Arsphenamin in practically all concentrations hemolyzes red blood cells in vitro, which is not the case with the other as ordinarily employed. The hydrogen-ion concentration of the latter, moreover, is practically that of the blood, which is not the case with alkaline or acid solutions of arsphenamin. It, therefore, causes less biochemical disturbance of the blood and tissues. In general terms, neoarsphenamin is more than two and one-half times less toxic for white rats, by intravenous injections, than the arsphenamin from which it is made. In the intensive treatment Schamberg is sure that neoarsphenamin is safest. He has found it possible to give it in full doses at frequent intervals, without reaction, and believes it good practice to administer 0.9 gm. three times a week in early cases of syphilis. He does not know of any rigid and extended comparative test that has been made of the two drugs, but states that such an investigation is now being carried out.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

JANUARY 15, 1920

EDITORIALS

PUBLIC HEALTH IN INDIANA

Public health work was begun in Indiana in 1881, the same year in which the germ of typhoid fever was discovered. At that time the future great work of hygiene was seen only as through a glass darkly. Only a very few of the wonderful discoveries of Pasteur and others were then known. In 1882 Koch discovered the tubercle germ and pointed the way to the conquest of consumption. In 1899 the Indiana pure food law was passed, which foreshadowed and supplied not a little of the text of the national law of 1905. In 1909 the health law was amended for the better and disease prevention work, which had lagged under the first law, went forward vigorously. Since 1900 there has appeared in Indiana the vital statistics law, the quarantine law, the sanitary schoolhouse law, the medical inspection of school children law, the law for the prevention of infant blindness, the hydrophobia law, the antitoxin law, the law governing the sanitation of food producing establishments, the cold storage law and lastly in 1915 the special antituberculosis law. The public health service of the state has been characterized by ability and enthusiasm. It has pushed forward the great work of increasing wealth and happiness through conservation of the health and lives of the people. In the last fifteen years the vital statistics show that diphtheria deaths have decreased 65 per cent., typhoid fever deaths have decreased 30 per cent. and consumption deaths 7 per cent. Of course, sickness rates have fallen with the death rates.

The records show that the pure food and drug work of the State Board of Health has been very fruitful of good results. When the work first began in 1907 over 65 per cent. of the food and drug samples which were collected were adulterated or below legal standard, and today this percentage is below 3 per cent. This represents an enormous saving to the people in money and in health.

Other public health work of great worth for the prevention of disease done by the state

board is the sanitary survey of Lake Michigan where it borders on Indiana; the sanitary survey of the Ohio River along the entire Indiana border, and the like surveys of the Wabash and White rivers. Surveys have also been made of all the city and town public water supplies and advice given in accordance with the findings.

The State Board of Health has treated in its Pasteur laboratory, since 1911, over 700 citizens who were bitten by rabid dogs or other rabid animals, with only one death. It has also in ten years in its bacteriological laboratory helped in the diagnosis of over 160,000 cases of sickness. And it is believed that this help has been instrumental in saving many hundreds of lives annually. We are told by health authorities of other states and by the U. S. health authorities that our state stands second to no other commonwealth in work done for the public health and for results obtained.

VIOLATION OF THE MEDICAL LAWS

It is a little difficult for us to understand why we have medical laws and boards of medical registration and examination if our medical laws are not to be enforced. In Indiana for instance there are several hundred medical pretenders of various sorts who are actually practicing medicine without hindrance. Among these are some chiropractors who do not confine themselves to "adjustments," but go farther by practicing surgery and prescribing medicine. Even the osteopaths, licensed to practice osteopathy, which according to the tenets of the founders of osteopathy is a drugless and non-surgical method of healing and curing the sick, are openly prescribing medicine and performing surgical operations just like any regular practitioner. When an osteopath uses local anesthetics and prescribes narcotics, tonics and anti-syphilitic remedies he is practicing medicine without being qualified to do so and without complying with the legal requirements for the practice of medicine. We think it is high time that we have a showdown as to just where we stand concerning the enforcement of the law. In fairness to all, and to the public in particular, those who practice the healing art should be well grounded in the fundamental branches of medicine, and all should be required to know the human body in health and disease. After one has acquired such knowledge, his judgment may be allowed to prevail in the selection of the particular kind of treatment that is to be employed, but up to that period every one who

practices the healing art should comply with the same requirements. It is nothing short of idiotic to permit osteopaths, who never had any training in pathology and bacteriology, or in the diagnosis of disease as taught by those of ability and experience, to practice surgery which is not merely a mechanical procedure to be performed as a mechanic builds or tears down houses but requires the keenest kind of judgment based on a knowledge of all the fundamental branches of medicine. Likewise, it is equally as idiotic to permit an osteopath to prescribe medicine of any kind, inasmuch as he has never been taught to recognize the effect of or the indications for the use of medicine. There are osteopaths, chiropractors and others in the State of Indiana who break the medical law regularly, and so far as we know there has not, up to the present time, been any effort put forth to punish the offenders. Why not make our medical law count for something or cut it out of the statute books altogether?

RECORD OF INDIANA DOCTORS IN THE LATE WAR

As previously announced, we contemplate publishing in *THE JOURNAL* a brief record of the service of Indiana doctors in the late war. To get the necessary information we have asked the cooperation of the secretaries of the county medical societies, to each of whom we have sent a blank asking that the names and a brief military record of all doctors in the county who served in the late war be sent to us. Up to the present time less than a dozen secretaries have paid any attention to the request, and most of those who have answered inform us that great difficulty is encountered in securing information from the doctors who are entitled to representation in the record we hope to publish. It is very evident that unless we have the cooperation of all those who are interested it will be impossible for us to publish a record that in any way does justice to the subject, and unless we can have a record that is reasonably complete we shall publish nothing at all.

To attempt to get reliable information from the War Department at Washington or from the State Council of Defense means failure to get anything that is trustworthy, as we know from previous experience. The information that is most likely to be correct and comprehensive is that which is furnished by the individual men who served, and it is to them especially that we are appealing. It is not our intention to publish anything elaborate, but rather to give the essential facts for

preservation as a permanent record. We have counted on the assistance of secretaries of county medical societies because we thought that they would know the names of doctors in their respective counties who served in any way in the late war, and it would be easy for them to secure the data required. All that we have asked is an answer to the following questions: Name; address at time of enlistment (give name of county); date of enlistment; rank when enlisted; kind of service and where (whether in the army or navy, at home or abroad, and any special service); date of discharge, or death if dying in the service; rank at discharge or at death.

It is needless to say that we cannot publish a personal history of every doctor who served in the war from the time of his enlistment until the time he was discharged, including a record of all his various transfers, variety of service in which he was engaged, and much other information that might be of interest, but we can and we desire to publish such a brief record as outlined, and to that end we solicit the cooperation of every ex-service man in the medical profession. We propose to publish the lists by counties, and if every Indiana doctor who has a military record will take the time and trouble to furnish answers to the questionnaire that has been sent out, sending same to the secretary of his county medical society at once, we shall be able to complete our work with reasonable promptness. If, for any reason, the information is not sent to the county medical society secretary, then send it direct to the editor of *THE JOURNAL*, but in order to avoid mistakes be sure and designate the county under which the information is to be tabulated. Some of the doctors may have moved since the war, but we shall credit each name to the county in which the doctor lived at the time of his enlistment.

Finally, let us add that if we fail to publish such a record as contemplated, which means a great deal of work and expense on the part of *THE JOURNAL*, the fault will lie with those who should be most interested.

DEATH OF SIR WILLIAM OSLER

The death of Sir William Osler marks the passing of one of the most highly esteemed and dearly beloved physicians and teachers of the age. As teacher, writer, and physician he had no peer, but, as has been said, it was his life—his winning personality, his cheerful disposition, his faith in mankind, and his love for his profession—more than his works which placed him at the pinnacle of his profession.

Dr. Osler was born in Tecumseh, Ontario, in 1849, received his preliminary education in Trinity College School and Toronto University, and graduated in medicine from McGill University, Montreal, in 1872. After studying two years abroad he returned and began to teach pathology in his alma mater, and in 1874 was made professor of the institutes of medicine of McGill University, which position he held until 1884, when he accepted the professorship of clinical medicine in the University of Pennsylvania, Philadelphia. In 1889 he became professor of principles and practice of medicine in Johns Hopkins University, Baltimore, leaving this position in 1905 to become regius professor of medicine at Oxford.

During his long career Dr. Osler was the recipient of practically every honor which the medical profession could bestow on those of merit in its ranks, culminating last July in the international celebration of his 70th birthday. In 1911 he was created a baronet of the United Kingdom by King George V. His contributions to medical literature comprise 730 titles, chief among which were his "Principles and Practice of Medicine," which was published in 1892, and the "Encyclopedic Modern Medicine," of which he was co-editor.

Dr. Osler was taken ill with pneumonia in November, pleurisy with effusion developing later, necessitating a thoracentesis. He made a strong fight, but death came December 29 at his home in Norham Gardens, Oxford, England. He is survived by his wife, his only son having died while in active service in the war.

In the history of medicine, Sir William Osler's name will appear as an example of the ideal physician, and the following quotation—his response to the presentation speech accompanying the memorial volume presented him by a distinguished committee on his 70th birthday anniversary—characteristic of the man, shows why he is loved and why he has succeeded:

"To have had the benediction of friendship follow one like a shadow, to have always had the sense of comradeship in work without the petty pinpricks of jealousies and controversies, to be able to rehearse in the sessions of sweet, silent thought the experience of long years without a single bitter memory, fill the heart with gratitude. That three transplantations have been borne successfully is a witness to the brotherly care with which you have tended me. Loving our profession, and believing ardently in its future, I have become content to live in it and for it. A moving ambition to become a good teacher and a sound clinician was fostered by opportunities of an exceptional character, and any success I may have attained must be

attributed in large part to the unceasing kindness of colleagues and to a long series of devoted pupils whose success in life is my special pride."

ADVERTISING AND ITS RETURNS

Every advertiser expects return from the money expended in gaining publicity. As a usual thing, increase of business following an advertising campaign indicates that the increase is due to the advertising. However, a certain amount of advertising does not bring immediate results but it does bring results in the future. For instance, every doctor occasionally finds himself looking up old medical journals where he remembers to have seen the advertising of some particular article that he did not want at the time but wants later on.

The only thing that makes advertising unproductive is failure on the part of the medium to circulate among the class of people who logically would be patrons of the advertising firm, or failure on the part of the advertiser to select the right medium. Thus, it would be wasted money to advertise Bibles in a periodical circulating among atheists, and it would be a waste of money to expect to get patrons in Indiana as a direct result of advertising in periodicals that have very limited or no circulation in the state of Indiana.

This brings us to the consideration of the advertising proposition as it affects us. *THE JOURNAL* is the one and only medium which goes to practically all of the prominent and progressive physicians of Indiana. Therefore, to one who wishes to advertise to Indiana doctors it is a selfevident fact that the logical thing to do is to advertise in *THE JOURNAL*. It also is the logical thing to advertise in *THE JOURNAL* those things in which doctors are or should be interested. From the fact that we have been able to retain for many years the advertising patronage of some of the best known and most trustworthy firms is evidence that advertising in *THE JOURNAL* really pays. There is, however, a limited number of advertisers who are so illogical in their reasoning that they do not want to give credit to any advertising unless patrons specifically state that they are giving patronage as a direct result of that advertising. To offset the arguments of these shortsighted advertisers we desire to ask that our readers mention *THE JOURNAL* when writing advertisers so that we may get credit for the service we are rendering, and in that way definitely prove our title to renewal of advertising contracts. However, it should be remembered that writing the adver-

tisers concerning THE JOURNAL is not merely the extension of a favor, but in reality is an act that brings its return, for the more advertising we receive the bigger and better THE JOURNAL can be made.

We have been able to furnish what we believe to be and what we have been told is an exceedingly creditable journal at a very minimum cost to the doctors of Indiana as a direct result of good business management, which has included the securing and holding of advertising contracts. With the present high cost of publication, which has been prohibitive to many journals and to others has meant continuation only through increase of subscription rates and decrease in size, it becomes more and more necessary to have a very much increased income in order to come out even. For that reason we are making strenuous efforts to not only hold our present advertising patronage, but increase it for the purpose of meeting increased cost of publication. The readers of THE JOURNAL can render a distinct service by regularly reading the advertising pages, which always offer something interesting, and whenever patronage is bestowed on any of the advertisers let the patronage be accompanied by a letter to the effect that THE JOURNAL has been responsible for or has aided in furnishing the inquiries.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

DUES are due!! What dues? Your county and state medical society dues for 1920. See your county secretary immediately!

AFTER Feb. 1, 1920, your county and state medical society dues are delinquent. Are you one of the laggards? Get in line immediately by handing your check to your county medical society secretary!

DR. G. W. H. KEMPER of Muncie, "the young man of the Indiana medical profession," sends us a greeting on his eightieth birthday, which occurred December 16. In good health, active and mind as clear as it was fifty years ago, Dr. Kemper is certainly entitled to the appellation we have given him.

THE recent report of the several hundred deaths and the greater number of cases of blindness resulting from the use of substitutes for liquor containing wood alcohol since prohibition became effective should arouse every physician to his responsibility in this matter. It behooves every doctor to carry on the work of educating the public to a knowledge of the fact that wood alcohol used internally or externally is a poison and may cause blindness and death.

It is a wise doctor who turns a deaf ear to the importunities of promoters who are seeking easy money by the selling of oil stock and asking for investments in other equally doubtful propositions. Fully 95 per cent. of the oil stock that is offered to the investing public is worthless. There never were more or better opportunities for investing in sound securities which afford a good rate on the money, and the doctor who invests his money in anything else is taking a gambler's chance and oftentimes worse.

THE newspapers announce that "the miracle man" at New Carlisle, Ind., counts millionaires among his patients, and that the wife of one of the wealthy Studebakers of South Bend told a newspaper reporter that "the miracle man's" mystic touch had given her instant relief. We can understand how "the miracle man's" touch has relieved her of some of her "filthy lucre," but it is beyond our comprehension to understand why a woman of a highly respected and supposedly intelligent family should have fallen for a preposterous fraud that has been advertised as such from one end of the country to the other.

A BILL to provide for compulsory state health insurance is to be introduced at the coming session of the New York State Legislature, according to the announcement of the governor of the state. This effort, it is stated, is to be a part of the governor's administration program, and has the support of the New York State Federation of Labor. The Medical Society of the State of New York has unanimously adopted the report of its special committee on

this subject, unqualifiedly opposing the passage of any law instituting a system of compulsory health insurance. This brings the question to a clear cut and definite issue in New York. The outcome is to be watched with interest, as the standing of the state of New York in the Union, it being one of the oldest and most highly developed states, industrially, commercially and socially, makes it a typical state to discuss and test out this important subject.

A PHYSICIAN'S telephone exchange is a new departure in facilities for furnishing easy access to individual doctors no matter where located. The physicians of a city or good sized town establish an office, with some one in charge day and night, said office being known as the physicians' telephone exchange, and to which every doctor in the community subscribes. Whenever a doctor leaves his office for any length of time he notifies the exchange where he can be found. The public is advised that whenever a doctor cannot be reached at his office or home he probably can be reached by inquiring at the telephone exchange. It is the duty of the telephone exchange to locate the doctor if possible, and it is said that the service is appreciated alike by medical men and the public. On the whole, it is but a little expense to individual members of the medical profession, and it is the means of furnishing great convenience to every one concerned.

A CHIROPRACTOR is advertising in the Fort Wayne newspapers in such a way as to leave the impression among readers that he not only served in the late war as a chiropractor in connection with the Medical Department of the Army, but after the armistice was signed was sent at government expense to perfect himself in "chiropractic spinagraphy and spinal roentgen ray." We are reliably informed that the government never recognized chiropractic or any of the pseudomedical cults, and for any chiropractor to lay claim to such distinction is to play on the credulity of the public. Most if not all of the members of pseudomedical cults who served in the late war were privates and had no active work in connection with the treatment of sick and wounded soldiers. It is nothing short of the rankest imposition on an easily deluded public to lay claim to preferment that never was received, and it seems to us that the Medical and Surgical Department of the Army ought to have something definite to say concerning the subject.

As evidence that the arrogance of the German people has not been defeated in any sense whatever, *The Journal of the American Medical Association*, December 20, quotes the following from the *Neue Freie Presse* of Munich concerning the German chemical industry: "German brains, it is now planned, are to be lured by entente gold and pressed into the service of our former enemies, principally in America, where drugs, chemical products and dyes are so awfully scarce. American indigo, it is said, has been rejected by the dyeing industry, the same as American salvarsan by physicians. No wonder Americans have offered a Munich chemist an annual salary of 2,000,000 marks." *The Journal of the American Medical Association* further adds that "to those who are familiar with what American chemical industry has accomplished during the war, this item would be amusing if it did not reveal the fact that the old arrogance and conceit, which it was hoped the war would somewhat modify, still dominate to a considerable degree in the German mind."

MUCH is being said about the use of saccharin in place of sugar, due to the present shortage and high price, and many careless statements have appeared in newspapers by physicians, who assert that on account of the lessened consumption of sugar the health standards of the community have been improved and that hospital records show a decline in the number of patients admitted. *The New York Medical Journal* (Dec. 6, 1919) comments on this subject very forcibly and emphasizes the food value of sugar, its tendency to be rapidly and economically assimilated and to furnish heat and energy to the human body. It further states that if sugar is withdrawn from the diet it must be replaced by some other food or the bodily resistance will be lowered and invading organisms will more easily secure a footing, thus inviting infection. No harm has been noted from the use of saccharin as a substitute, but the argument is put forth that merely because saccharin does no harm is not sufficient reason for its being used as a substitute for sugar which is an essential as a food.

IN the December number of *THE JOURNAL* we published an editorial entitled "Traitors and Disloyalists," in which we pointed out the present danger to American interests through the attitude assumed by the foreign labor element in the United States. One of the readers of *THE JOURNAL* has suggested that the editor is unduly

excited over the question and has made a mountain out of a molehill. However, since then the government has made a raid on the "Reds" and unearthed a rather far-reaching conspiracy to overthrow our government and destroy our property interests as at present established. Most of the American people are inclined to be too easy-going and too apathetic in the matter of acts and demeanor which should receive serious consideration. In an emergency we act quickly and effectively, but we are too prone to "lock the barn after the horse is stolen." A handfull of disturbers were able to overthrow the Russian government and, while it would be impossible for the socialists and their kind to overthrow the United States government as the government of Russia was overthrown, yet, an uprising of alarming possibilities and far-reaching damage could occur if we close our eyes to the evidence all about us, which so many people pass off lightly as originating with harmless cranks. Evidence seems to prove that a well matured plot existed to overthrow the United States government, and it is with a feeling of satisfaction that we note that more stringent laws governing the detection and punishment of traitors and disloyalists of every description will be passed by the present congress. In the meantime doctors as well as other citizens in every community throughout this land owe it to themselves as well as the government to lend a hand in stamping out disloyalty of every description. American standards of justice and liberty deserve to be protected and must be protected at all costs.

DESPITE the fact that newspapers have pronounced him a fake, Harry Mays, "the miracle man," at last reports continued to hold forth at New Carlisle, Ind., where it is said that patients are coming to him from all over the United States. According to a Chicago newspaper Harry Mays, an ex-pugilist, ship riveter, automobile mechanic, and formerly a seeker after odd jobs of every description, together with a woman styling herself Mrs. Marie Mays, struck out in a "flivver" for the country where the picking is good, and after being ordered on by two or three mayors and chiefs of police, landed at New Carlisle, where he blossomed out as Dr. Harry Mays, "the miracle man." To him came in a steady stream the lame, the halt, the blind, old men and women and children, all afflicted and suffering, and seeking cure at the hands of "the miracle man." As one of the newspapers says, there are two phases to the situation in New Carlisle, the comic and the

tragic. The comic phase is concerned with the incomprehensible gullibility which has permitted such an arrant fraud to flourish. The tragedy is in the sorrowful spectacle of the sick, who come with hopeful hearts and soulful eyes, buoyed by the hope which springs eternal, and doomed to the inevitable reaction of despair when the expected cure fails. A chance remark by the ex-pugilist to the effect that he could cure anything with his hands is what has led to the present flood of 400 to 500 patients per day to see the faker. It is the gullibility of the people that has made it possible to incorporate the New Carlisle Sanitarium, though we really believe that the president and cashier of the leading bank of New Carlisle should be in a more reputable business than holding offices in a corporation that is organized for the perpetration of what is so apparently a fraud. The time will come when a lot of people will be sadder but wiser, and the time should come when those responsible merchants and business men of New Carlisle who have tolerated such an arrant fraud as "the miracle man" should be given scant consideration in the matter of confidence and public esteem on the part of sensible citizens of the community.

DEATHS

T. G. DONALDSON, M.D., died recently at his home in Kentland.

JOHN LOOMIS, M.D., aged 99 years, died at his home in Jeffersonville December 22.

JOHN F. FINLEY, M.D., aged 73 years, died December 25 at his home in Palmyra. Death was due to cardiac failure.

FRANK C. LODER, M.D., formerly of Indianapolis and Evansville, took his own life in a hospital at Logansport December 30, aged 55 years.

WILLIAM P. HANNA, M.D., aged 69 years, died December 14 at Lafayette. He was graduated from the Jefferson Medical College in Philadelphia.

WILLIAM P. VAN SANT, M.D., Brooklyn, died December 5 at the Methodist Hospital in Indianapolis. He graduated from the Columbus Medical College in 1880.

FRANK C. STEWART, M.D., aged 66 years, died January 1 at his home in Indianapolis. He graduated from the Hahnemann Medical College and Hospital of Chicago in 1886.

M. F. GERRISH, M.D., aged 64 years, died at his home in Seymour December 16. He graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1881.

RACHEL SWAIN, M.D., Indianapolis, died December 31 at Long Beach, Calif., aged 80 years. Dr. Swain graduated from the Northwestern University Woman's Medical School in 1882.

O. T. LOGAN, M.D., formerly of Indianapolis and recently a medical missionary in China, was accidentally shot and killed at Hunan, China. Dr. Logan has served as missionary for twenty-three years in China.

LEONORA E. KNERR, M.D., aged 68 years, widow of Dr. Charles B. Knerr, died at her home in Indianapolis December 14. Dr. Knerr was graduated from the Indiana University School of Medicine in 1898.

JOHN F. CLOVER, M.D., of Evansville, died December 28, aged 64 years. For many years he was assistant superintendent of the Southern Indiana Insane Hospital. He was a graduate from the Illinois University College of Medicine, Chicago, in 1888.

R. C. MACKEY, M.D., aged 68 years, died at his home in Hobart December 3. He graduated from the Chicago College of Medicine and Surgery, School of Medicine of Loyola University. He was a member of the Lake County Medical Society and the Indiana State Medical Association.

ROBERT FOSTER, M.D., Russelville, died December 29 at Culver Union Hospital, Crawfordsville, following an operation for appendicitis, aged 48 years. Dr. Foster graduated in medicine from the Kentucky School of Medicine, Louisville, in 1903, and was a member of the Montgomery County Medical Society and the Indiana State Medical Association.

MITCHELL O. DEVANEY, M.D., Indianapolis, was drowned in Fall Creek December 31 when the automobile which he was driving ran over a

30-foot embankment into the creek. Dr. Devaney was pinned beneath the machine. He was a member of the Marion County Medical Society, the Indiana State Medical Association and the American Medical Association.

JOHN F. TAGGART, M.D., died of epithelioma on November 30 at the home of his son in New Washington, aged 83 years. He graduated from the Jefferson Medical College in the year 1860 after which he enlisted in the army and served as surgeon in the Fourth Indiana Cavalry during the Civil War. After being mustered out he located at Charlestown where he practiced his profession until six years ago when he retired to live with his son.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. J. W. NOLAND of Buffalo has removed to Monon to practice medicine.

DR. JOHN H. ALLIN of Centerville has removed to Chicago for the practice of medicine.

WABASH COUNTY is to have a new hospital, sealed bids for which will be opened on January 21.

DR. RALPH ARNOLD, recently returned from military service, is planning to open offices in Greenfield.

DR. J. C. ROSS, recently returned from military service, has opened offices in the Glass Block at Marion.

DR. EDWARD E. JOHNSTON of Starr City has removed to Texas, where he will locate for the practice of medicine.

DR. I. C. RITTER of Indianapolis has purchased property in Spencer and moved there for the practice of medicine.

DR. FRANK T. KILGORE of Daleville has recently been commissioned major in the medical corps of the United States Army.

SERBIA and Albania again are suffering an epidemic of typhus. Sixty-two American Red Cross nurses are now on duty there.

E. A. WILLIS, M.D., recently returned from military service, has located in Indianapolis with offices in the Newton Claypool Building.

LYMAN OVERSHINER, M.D., of Indianapolis, and Miss Ella Ingles were married December 13 in Indianapolis, where they will reside.

J. M. SHIELDS, M.D., has been appointed senior member of the city board of health of Seymour, to succeed the late Dr. M. F. Gerrish.

DR. E. H. PEA of Vincennes has returned from military service and opened offices at 112 North Seventh Street for the practice of medicine.

DR. OTTO GRISIER of Columbia City has been assigned to duty at a naval hospital at San Francisco, where he will be stationed until spring.

DR. A. E. MOZINGO, recently discharged from military service, has opened offices in the K. of P. Building, Indianapolis, for the practice of medicine.

DR. CLARENCE STRICKLAND of Cold Springs Road, Indianapolis, has gone to Baltimore, where he will take a postgraduate course at Johns Hopkins.

DR. M. C. WILSON of Lafayette was appointed physician for the county farm and county jail by the board of county commissioners, December 6.

DR. E. N. KIME, recently returned from military service, has associated himself with Dr. W. H. Foreman, Indianapolis, for the practice of internal medicine.

DR. WALTER M. STOUT of Indianapolis has been engaged to fill the vacancy in the staff at the Newcastle Clinic, caused by the death of Dr. C. J. Cronendyke.

DR. WALTER M. STOUT, who has been connected with the Indianapolis City Hospital, has become identified with the Newcastle Clinic and will take up general practice there.

DR. J. H. REED, Logansport, has been appointed pension examiner for Logansport to replace the board of examiners. The appointment became effective December 9.

AT the annual meeting of the Shelby County Medical Society, held at Shelbyville December 26, a committee of five was appointed to investigate the prospects of a county hospital.

GEORGE E. ITERMAN, M.D., formerly of Greggsville, Ill., has recently become a member of the Newcastle Clinic staff, and has located in Newcastle for the practice of medicine.

L. R. TAYLOR, chemist in the laboratories of the state board of health, has resigned to become the director of the scientific department of the French Lick Springs Hotel Company.

DR. AND MRS. EDMUND D. CLARK announce the engagement of their daughter, Helen Mary, and Arnold M. Talbott of New York, son of Dr. and Mrs. John H. Talbott of Indianapolis.

THE physicians and surgeons of Marshall County have introduced an advanced schedule of fees which took effect on December 1. This advance is occasioned by the increased cost of all supplies.

THE medical staff for the examination of all grade pupils of the Fort Wayne city schools, for the ensuing year, is as follows: Dr. C. R. Dancer, chief; Drs. I. W. Ditton and Carrie Banning, assistants.

DR. O. EVERMAN of Indianapolis has been commissioned major in the Public Health Service and is now on active duty at the U. S. Public Health Service Hospital at West Roxbury, Boston, Mass.

DR. BURTON DORR MYERS, head of the Medical Department of Indiana University, of Bloomington, underwent an operation for gallstones at the Robert W. Long Hospital, Indianapolis, on December 1.

THE Dubois County Medical Society held its annual election on December 16 at Huntingburg. The new officers are: President, Dr. L. B. Johnson, Ireland; secretary-treasurer, Dr. W. D. Bretz, Huntingburg.

DR. GEORGE W. CRILE of Cleveland has given \$100,000 to endow a chair of surgery in the Western Reserve University School of Medicine, Cleveland. Dr. Crile is a member of the surgical staff of the university.

FRANKTON, Ind., a town of 1,000 in a farming country second to none, thickly settled, is in need of a good general physician. There is but one doctor there now and the community needs the services of another medical man.

DR. A. R. SCHAEFFER, 70 years old, who had practiced medicine in Alexandria, was discovered, December 10, unconscious and almost frozen in his home. He was taken to the Alexandria Hospital in a critical condition.

DR. WILLIAM R. BATHURST of Little Rock, editor of *The Journal of the Arkansas Medical Society*, has been elected secretary of that society to succeed the late Dr. C. P. Meriweather, thus combining the office of secretary-editor.

OVER 1,000 cans of fruits and jellies were donated to the Goshen Hospital on Donation Day, by the housewives and school children of Goshen and vicinity. Donation Day for Goshen Hospital will be an annual event in the future.

THE November report of the state board of health shows total births for that month 4,851, or rate of 19.7 per cent., and 2,588 deaths, making a rate of 10.5 per cent. Scarlet fever was the most prevalent infectious disease during the month.

DR. W. J. MAYO of Rochester left January 7 for Argentine and other South American countries to promote an international organization for the advancement of surgery. Dr. Mayo was accompanied by Dr. Franklin Martin of Chicago.

ELMER GROSVENOR, 28 years old, son of Dr. and Mrs. E. B. Grosvenor of Indianapolis, was instantly killed, December 12, when the automobile in which he was riding collided with an interurban car at North Baltimore, Ohio, where he resided.

THE jury in the case of Dr. F. W. Krueger, Richmond, charged with involuntary manslaughter in connection with the death of an infant, reported late Tuesday, December 9, that a verdict could not be reached, the vote standing ten to twenty for acquittal.

DR. ST. C. DARDEN, formerly of Poughkeepsie, N. Y., has assumed the duties of superintendent of the Healthwin Hospital, South Bend, in the place of Dr. R. C. Kirkwood, who resigned to enter public health work at New Haven, Conn.

DR. W. J. MALLOY, a prominent Muncie physician who ranked as captain with the Medical Corps of the Army, is included in the list of public health service examiners for Indiana, which has just been published by the American Red Cross Society.

G. D. MARSHALL, M.D., of Kokomo, has been appointed medical examiner for the federal public health service of Howard County. He will render services to all ex-soldiers, sailors and marines who require medical attention and are without means to pay.

DR. W. C. DUNSCOMBE, for the past three years in charge of the Wabash Valley Sanitarium at Lafayette, tendered his resignation and left that institution on January 1. Dr. Dunscombe is to be chief surgeon for the South Porto Rican Sugar Company.

DR. HENRY C. GAMMILL, for many years an assistant surgeon in the United States Army, took charge of the Fort Wayne Free Venereal Clinic, December 10. In the future, clinic hours will be from 2 to 4 p. m. and from 6:30 to 8:30 p. m. on Monday, Wednesday and Friday.

ON January 1 the *Medical Herald* of Kansas City, Mo., and the *Medical Fortnightly* of St. Louis will join forces and thereafter will be issued as one journal. Dr. Thomas A. Hopkins, editor of the *Fortnightly* for nearly fourteen years, has joined the staff of the *Herald*.

THE Vigo County Medical Society held its last meeting of the year December 16 at Terre Haute. Officers were elected as follows: President, Dr. M. R. Coombs; vice president, Dr. J. S. Shaffer; secretary, Dr. W. D. Asbury; member of board of censors, Dr. A. M. Mitchell.

AT the meeting of the Wayne County Medical Society held at Richmond, December 3, the following officers were elected for the coming year: Dr. E. E. Holland, president; Dr. V. C. Griffis, secretary; Dr. Dressell, treasurer; Dr. J. E. King, delegate to the state association.

At the annual meeting of the Third District Medical Society of Indiana which was held in Huntingburg December 16, the following officers were elected for the ensuing year: President, Dr. Walter Sherwood, Mitchell; secretary-treasurer, Dr. J. Y. McCullough, New Albany.

THE Department of Health of the City of New York has issued a statement that all physicians who fail to report communicable diseases will be prosecuted. This action was made necessary by the apparent laxity in this matter on the part of physicians, hospitals, clinics, etc., in that city.

IN accordance with the provisions for medical inspection in the Bedford city schools, Dr. D. J. Holland, employed by the board of education, has begun an examination. Miss Stella Clipp, recently returned from service as a nurse in the army, has been employed as school nurse for the year.

At the meeting of the Bartholomew County Medical Society, held in Columbus, December 9, the following officers were elected for the coming year: President, Dr. James W. Benham; vice president, Dr. George Cline; secretary-treasurer, Dr. H. H. Kamman; censor, Dr. F. D. Norton.

THE Lawrence County Medical Society has elected the following officers for the new year: President, Dr. J. T. McFarlin, Williams; vice president, Dr. R. B. Short; secretary-treasurer, Dr. F. S. Hunter. Rates for visits in the city were raised to \$2.50 for day visits and \$3.50 for night calls.

At a meeting of the Gary Memorial Post of the American Legion, held November 20, the following officers were elected: Commander, Dr. Simon J. Young; vice commander, Daniel J. Redding; adjutant, C. A. Lawrence; treasurer, J. Fred Frye; district committeeman, E. D. Southworth.

At a meeting of the Laporte County Medical Society held at Laporte December 12, the following officers were elected for the new year: President, L. A. Wilson; vice president, James Fargher; secretary, H. H. Martin; treasurer, E. G. Blinks; censors, J. B. Rogers, John Kelly, C. E. Burleson.

A REVIEW containing medicomilitary news, information bearing on the problem of disease control, extracts of current medical literature, and notes on investigations being carried on in the army, is to be published semi-monthly by the Surgeon-General of the Army, for officers of the Medical Department.

DR. RALPH M. FUNKHOUSER, formerly of Indianapolis and recently returned from military service, is now connected with the division of criminology of Illinois, with headquarters at Chicago. Dr. Funkhouser's work is the examination and classification of the inmates of penal and correctional institutions.

At the meeting of the Putnam County Medical Society held December 11 at Greencastle, the following officers for the new year were elected: Dr. W. D. Conn, president; Dr. W. A. Mosier, vice president; Dr. Cassel Tucker, secretary-treasurer, and Dr. Eugene Hawkins, Dr. J. F. Cully and Dr. J. F. Hope, censors.

THE doctors of Princeton have announced that beginning with the new year, all offices will close at 5:30 in order to give the doctors more time with their families and that they might have more time for study and scientific research. Anyone wishing to see doctors after closing hours, must do so by appointment.

J. D. COONS has been appointed to the position of medical examiner for the department of War Risk Insurance in Lebanon and Boone County. The examiner is appointed for the purpose of examining ex-service men who have made claims to the government for treatment for disabilities acquired while in the army.

DR. HENRY B. CONRAD, a graduate of Johns Hopkins, who was on the house staff of the department of children's diseases at Johns Hopkins Hospital and the Thomas Wilson Sanitarium for Children, as specialist for two years, has been added to the staff of the South Bend Clinic as a specialist in children's diseases.

At a recent meeting in the Penway Building, Indianapolis, the Marion County Homeopathic Medical Society chose Dr. A. A. Ogle, Dr. O. S. Runnels and Dr. W. E. George as a committee to draw up resolutions expressing appreciation of the record of the late Dr. Frank C. Stewart, who died January 1 at his home in Indianapolis.

At the meeting of the Floyd County Medical Society held December 12 at New Albany, the following officers were elected for the coming year: President, Dr. Felix W. Hazelwood; vice president, Dr. J. H. Ashabranner; secretary-treasurer, Dr. P. H. Schoen; censors, Dr. R. W. Harris, Dr. William L. Starr and Dr. J. W. Baxter.

THE Grant County Medical Society honored its members who were in the army, at a special meeting, held November 24. Dr. Erle Daniels gave a most interesting paper on the subject of pneumonia. Among the physicians who had been in service present at the meeting were Drs. McQuown, Erle Daniels, Merrill Davis, Albert Davis, Rogers and Ross.

At a meeting of the Wabash County Medical Society held December 23 at Wabash, the following officers were elected for the coming year: President, Dr. Emma Holloway, North Manchester; vice president, Dr. L. O. Sholtz, Wabash; secretary-treasurer, Dr. F. M. Whistler, Wabash; censors, Drs. P. G. Moore, Loren W. Smith and James Wilson.

At a recent meeting of the Vanderburg County Medical Society the following officers were elected for the ensuing year: President, Dr. Herbert Willis; vice president, Dr. John H. Hare; secretary, Dr. William E. Barnes; censor, Dr. B. S. Rose; delegate to the state convention at South Bend, Dr. Louis E. Fritsch; alternate delegate, Dr. A. M. Hayden.

MISS MABEL SCOTT, Noblesville, who has been assistant superintendent of the nurses in the City Hospital at Indianapolis, has accepted the superintendency of the Hamilton County Hospital in Indianapolis and will assume her duties the first of next week. She succeeds Miss Josephine Dollings, who resigned recently and returned to her home at Indianapolis.

At a recent meeting of the Martin County Medical Society, held in Loogootee, the following officers for the ensuing year were elected: President, Dr. J. F. Michaels; vice president, Dr. William Gilkison; secretary-treasurer, Dr. G. M. Freeman; delegate, Dr. T. A. Hays; alternate, Dr. E. E. Long; censors, Drs. J. C. Trublood, G. M. Robinson and E. E. Long.

A MATERNITY rest home where women can go for a short time before entering the regular maternity wards or to recuperate afterwards, is to be founded in the former Kaiser's castle at Urville, near Metz. Funds were contributed by the American Red Cross for the establishment of this home, which is to be controlled by the two departments of the Meurthe and Moselle.

At a recent meeting of the St. Joseph County Medical Society the following officers were elected: Dr. J. B. Berteling, president; Dr. J. L. Wilson, vice president; Dr. R. B. Dugdale, secretary-treasurer; Dr. R. C. Shanklin, assistant secretary-treasurer; Dr. S. A. Clark, delegate to the Indiana State Medical Association meeting to be held next September, and Dr. R. L. Sensenich, alternate.

THE Sisters of St. Francis at Terre Haute have definite plans for the new wing which is to be erected in connection with the hospital in the near future. This wing will include a lecture room for the nurses, a diet kitchen, and a roentgen-ray room in the basement. All three floors will be equipped with modern improvements, such as running water in all rooms, private baths for patients, etc.

At the meeting of the Clinton County Medical Society, held December 4, the following officers were elected for the coming year: Dr. S. B. Sims, president; Dr. H. N. Oliphant, vice president; Dr. A. G. Chittick, secretary-treasurer; H. R. Rohster, C. A. Robison, M. F. Boulden, board of censors. Dr. Boulden was named delegate to the state convention and Dr. Clark delegate to the district convention.

ON a recent inspection tour in the Terre Haute schools, it was found that a thorough health program for local schools was badly needed. Plans are under way for the appointment of a supervisor who will be responsible for sanitation in the schools, and the program includes medical inspection, dental inspection, services of nurses, free treatments, and special instructions for subnormal students.

THE establishment of a nurses' training school in connection with the Goshen Hospital with funds from the estate of the late Mrs. Laura Kindig, is being planned as a way of carrying out the provisions of Mrs. Kindig's will, which

set aside about \$60,000 of the estate for the establishment of "The Laura A. Kindig Seminary," for the "business, scientific, and literary education" of girls at the lowest possible cost.

At the meeting of the Whitley County Medical Society, held December 9 in Columbia City, the following officers were elected for the ensuing year: President, Dr. Bruce Hart, South Whitley; secretary-treasurer, Dr. H. M. Egolf, Columbia City; censors, Drs. O. V. Shuman, F. G. Grisier and D. S. Linvill. A resolution was passed at this meeting favoring the erection of a hospital as Whitley County's memorial to the world war veterans and nurses.

DURING December the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Nonofficial Remedies:

Calco Chemical Company: Procaine-Calco.

Merck and Company: Ichthyol-Merck.

E. R. Squibb and Sons: Thyroxin-Squibb; Typhoid Paratyphoid Bacterin (Special Bacterial Vaccine No. 13)-Squibb.

Winthrop Chemical Company, Inc.: Sajodin.

THE ordinance known as "an ordinance protecting public health from venereal disease, defining the duties of physicians, householders and public health officers in connection therewith, restricting diagnosis or treatment by druggists, prohibiting the display of advertisements of venereal treatments in public places, and prescribing penalties," was passed without amendments, culminating a heated debate on the subject, by the city council of Logansport, December 1.

At the closing session of the convention of the Society of American Bacteriologists, held at Boston, the following officers were elected for the coming year: President, Dr. Charles Krumwalde of the research laboratory of the New York Health Department; vice president, Dr. F. C. Harrison, president of the MacDonald College, Montreal, Canada; secretary-treasurer, Dr. A. Parker Hitchens of Indianapolis, head of the biological laboratories of Eli Lilly and Company.

THE New York City Health Department, with the aid of the U. S. Navy, Recruiting Division, has supervised the making of a motion picture called, "Some Wild Oats," which has now been released. The picture is in seven reels and is for the purpose of educating the public

to the dangers of venereal diseases. It is considered the best propaganda film on public health subjects, that has ever been made, and should be shown in every municipality of the United States.

At the meeting of the Fountain-Warren County Medical Society, held in Attica December 11, the following officers were elected for the ensuing year: C. G. Beckett, president; S. Lambright, Covington, vice president; A. M. Sullivan, secretary-treasurer; censors, E. W. Kirk, Veedersburg; A. L. Spinning, Covington, and R. Stephenson, West Lebanon. Dr. A. C. Holley was named delegate to the state convention and Dr. L. A. Bolling, delegate to the district convention.

At the meeting of the Wells County Medical Society held in Bluffton December 16, the following officers were elected for the ensuing year: President, Dr. B. W. Harris, Uniondale; first vice president, Dr. D. C. Wybourne, Osian; second vice president, Dr. J. W. McKinney, Bluffton; secretary-treasurer, Dr. G. B. Morris, Bluffton; new member of censorship board, Dr. Fred A. Metts, with associates, Dr. C. L. Blue, Tocsin, and Dr. Frank Garrett, Liberty Center.

At the annual meeting of the Jackson County Medical Association, held in Seymour, December 4, the following officers were elected for the ensuing year: Dr. G. H. Kamman, president; Dr. J. H. Niles, vice president; Dr. L. B. Hill, secretary-treasurer; Dr. A. May, Crothersville, censor for three years; Dr. G. G. Graessle, delegate to the state convention; Dr. J. M. Jenkins, Cortland, alternate; Dr. C. E. Gillespie, delegate to the district convention, and Dr. J. K. Ritter, alternate.

RETURNS from a special election held in Franklin County Saturday to decide whether the county commissioners could appropriate money for a hospital in the city of Franklin as a memorial to the men from this county who served in the world war, show that the proposal was defeated by a vote of 1,750 to 382. It is believed here that the defeat was due to the fact that taxes in this county will be higher this year than ever before and that the taxpayers are opposed to anything that will cause a further increase.

TWENTY-TWO of the ninety-seven applicants who passed the examination for registered nurses in Indiana made general averages above

ninety, winning places on the honor roll, according to announcement of the state board of registration and examination. Because most of the nurses made low grades in the examination on subjects pertaining to children's diseases, Miss Edna Humphrey of Crawfordsville, secretary-treasurer of the board, declared that a hospital was needed in Indiana where nurses will be trained especially in the care of children.

ACCORDING to a notice from the Secretary of the Treasury, treasury certificates of indebtedness, Series T J-1920, dated and bearing interest from Dec. 15, 1919, payable June 15, 1920, with interest at the rate of 4½ per cent. per annum, semiannually, under the authority of the act approved Sept. 24, 1917, are offered for subscription, at par and accrued interest, through the federal reserve banks. Almost any banking institution in the United States will handle your subscription for you, or you may make subscription direct to the federal reserve bank of your district.

THE Fort Wayne Medical Society, at their January 6 meeting, adopted a new scale of minimum fees to become effective at once. The fee bill is as follows: Day visits, \$2; evening visits (6 p. m. to 10 p. m.), \$3; night visits (10 p. m. to 6 a. m.), \$5; office consultation, \$1.50 to \$5; advice or prescription over telephone, \$1.50; obstetrical cases, no complications, \$25; surgical assistance, \$10; anesthetics, \$10; major operations, \$50; minor operations, \$10. This schedule represents minimum fees. When complications arise higher prices will be charged at the discretion of the doctor. No maximum charge was named.

ONE of the curious results of the war in Poland has been the almost complete disappearance of rabies. Owing presumably to the large number of wolves and the many semi-wild dogs, rabies was a very common disease five years ago. The Pasteur Institute in Warsaw, which was opened by Pasteur himself, and was the second Pasteur Institute in the world, is said to have given more inoculations than any other institute. But when the American Red Cross first visited it, to offer assistance, they found only one doctor and only one patient. The building had been stripped by the Germans, but neither the doctor nor the patient seemed to take the lack of equipment very much to heart. "You see," the doctor explained with a smile, "we do not have very many mad dog cases now because the Germans ate up all the dogs."

THE Local Committee on Arrangements for the New Orleans Session of the American Medical Association, April 26 to 30, 1920, has been appointed as follows: Chairman, A. E. Fossier; secretary, T. J. Dimitry; treasurer, Paul J. Gelphi. The chairmen of the subcommittees are: Advisory, Charles Chassaignac; sections and section work, Homer Dupuy; registration, Hector E. Bernadas; finance, J. W. Newman; entertainment, Amedee Granger; halls and meeting places, William Seeman; hotels, J. J. Wymer; scientific exhibits, C. C. Bass; commercial exhibits, W. H. Block; information, Allan Eustis; publicity, Hamilton P. Jones; printing, W. H. Knolle; signs and placards, E. L. Leckert; transportation, H. W. E. Walther; badges, J. Birney Guthrie; golf, John B. Elliott; membership, William M. Perkins; clinics, H. B. Gessner; women physicians, Elizabeth Bass.

COL. H. A. METZ, president of the H. A. Metz Laboratories, Inc., has donated the necessary funds to the Volunteer Hospital of New York for the installation and development of a urological and syphilological department, both in the hospital and its dispensary. It is hoped that the department will not only be able to do the usual ambulatorium and bedside work of such a subdivision but that it will also engage in research work which may lead to preventive measures and to treatment, to lessen the evils of syphilis for the betterment of the race. This donation by Colonel Metz is in keeping with his action in developing a large scientific organization in his laboratories in Brooklyn. He has on his staff a number of eminent biologic and physiologic chemists who are engaged in research work, not only in connection with salvarsan and neosalvarsan, but other products, quite foreign to the arsenicals, are being studied and developed by these experts.

FORT WAYNE has one of the most promising free venereal clinics in the state. It was opened on Nov. 11, 1919, through the cooperation of the city, state and the United States Public Health Service, at first receiving patients on two days a week, later three days, and since January 1 has been open five days per week, from 2 to 4 and from 6:30 to 8:30 p. m. The clinic occupies three rooms on the second floor at 202 West Berry Street, and is in charge of Dr. H. C. Gemmill as clinic director and Miss Lillie Garard as clinic nurse. The report for December shows a total attendance of 178, with 160 treatments as follows: Syphilis 18, gonorrhea 30, chancroid 3, other venereal infections

1. This clinic, as well as the several other clinics established over the state, has a great opportunity for service, and physicians throughout the state are urged to cooperate to the fullest extent in the work which has for its ultimate aim the eradication of the venereal diseases.

At the Indiana conference on mental health, held at Hotel Severin, Indianapolis, December 15, under the auspices of the Indiana Society for Mental Hygiene, the following officers were elected for the coming year: Dr. William Lowe Bryan, Bloomington, president; T. Z. Fitzgibbon, Muncie, vice president; Paul Kirby, Indianapolis, secretary; Evans Woollen, Indianapolis, treasurer; Amos W. Butler, Indianapolis, chairman executive committee and members of the committee are as follows: Dr. S. E. Smith, Richmond; Dr. George S. Bliss, Fort Wayne; Mrs. Albion Fellows Bacon, Evansville; Miss Vida Newsom, Columbus; Charles A. McGonagle, Plainfield; Dr. Charles P. Emerson, Indianapolis. Directors for five years are: Dr. W. C. Van Nuys, Newcastle; Dr. F. W. Terflinger, Logansport; Jake Gimbel, Vincennes; Timothy Nicholson, Richmond; Dr. Paul E. Bowers, Logansport; Mrs. E. C. Rumpler, L. N. Hines, Dr. Emerson and Judge James A. Collins, Indianapolis.

THE following report for 1919 of the Surgeon-General of the Army, Major-Gen. Merritte W. Ireland, has been submitted to the Secretary of War: At the begining of the war the entire medical department, including commissioned officers, contract surgeons, army nurses, and civilian employees, numbered 8,634. This personnel reached a maximum of 354,796. The medical corps increased from 833 to 30,591, commissioned ambulance service from nothing to 209, contract surgeons from 181 to 939, commissioned sanitary corps from nothing to 2,919, and other branches of the service accordingly. During the year the number of men requiring medical treatment was 2,833,204. Of this number 2,422,362 cases resulted from disease, 182,789 from ordinary injuries, 228,053 from battle injuries. Influenza was the leading cause of admission, with measles the next most important during 1917 and 1918. The total number of deaths for the two years, including killed in action, was 103,137. Of this number 50,714 were from disease, 33,711 killed in action, 13,725 died of wounds, 648 lost at sea, 4,329 from ordinary accidents. Of the men mustered into military service, 115,664 were discharged for

disability. The reports thus far received show that 227,855 wounds were received in battle that required admission to hospital. Of the cases admitted to hospital for wounds, 148 were the result of aeroplane bombing, 181 bayonets, 71,453 gas, 870 hand grenades, 12 saber, 144,682 gunshot missiles. Reports show that 18,268 died in hospital as the result of battle injuries, 10 being the result of bayonet, 1,200 gas, 70 handgrenade, and 12,526 gunshot missiles

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

Financial Report for Year Ending Dec. 31, 1919

Balance on hand Jan. 1, 1919.....	\$ 2,954.05
Received of County Societies (1,865 members at \$4 each)	7,460.00
Indianapolis Exhibitors	570.00
Nine additional members for 1918.....	36.00
Indebtedness for two luncheon tickets.....	2.50
	<u>\$11,022.55</u>

DISBURSEMENTS

Journal subscriptions 1,865 members and 594 members in service at 75 cents.....	\$ 1,844.25
Medical Defense Fund 1,865 members and 594 members in service at 75 cents.....	1,844.25
Compensation Executive Secretary	1,200.00
Stenographic help	840.00
Salary of Secretary-Treasurer	300.00
Personal Expenditures of Secretary-Treasurer.....	217.40
Bond of Secretary-Treasurer for 1919 and 1920....	35.00
Office rent	450.00
Printing	434.22
Office supplies	59.24
Postage	86.00
Telephone and telegrams	186.47
Clipping service	13.87
Light service	6.38
Cash by Executive Secretary	78.76
Refund to County Societies for dues of members in service paid in 1918.....	460.00
Expenses of Councillor	5.93
Certified copy Articles of Incorporation I. S. M. A.	3.50
	<u>\$ 8,065.27</u>

Indianapolis Session:

Rent	\$ 399.35
Stenographer	150.00
Committee	10.45
Printing and signs	40.50
Buttons	12.35
Programs	19.40
Motion Picture Machine	35.00
Music	95.00
Ladies' Luncheon	115.00
Miscellaneous	61.45
	<u>\$ 938.50</u>
	<u>\$ 9,003.77</u>

Balance on hand Jan. 1, 1920.....	\$ 2,018.78
CHARLES N. COMBS, Secretary-Treasurer.	

Financial Report Medical Defense Committee for Year Ending Dec. 31, 1919

ASSETS

Balance on hand Jan. 1, 1919.....	\$ 1,555.50
Interest on Savings Account.....	3.37
Deposited for 2,459 members at 75 cents each.....	1,844.25
	<u>\$ 3,403.12</u>

DISBURSEMENTS

Compensation General Council	\$ 360.00
Bond of Chairman	15.00
Funk and Edwards Case	97.13
	<u>\$ 472.13</u>

Balance on hand Jan. 1, 1920.....	\$ 2,930.99
-----------------------------------	-------------

COMMITTEE ON HOSPITAL STANDARDIZATION OF THE INDIANA STATE MEDICAL ASSOCIATION

Meeting of the Committee on Hospital Standardization, December 11, at state office, 314 Hume-Mansur Building, Indianapolis. Present: Dr. W. H. Stemm, North Vernon; Dr. George D. Miller, Logansport, and Dr. Albert E. Sterne, Indianapolis, chairman, with President Charles H. McCully of Logansport. Absent: Dr. Joseph H. Weinstein, Terre Haute, and Dr. George W. Spohn, Elkhart.

After a thorough and careful discussion of the entire hospital situation of the state, it was decided that the most expeditious and economical method of inspection of the various hospitals of the state, compatible with thoroughness, lies in dividing the state into three sections—a northern, a central and a southern. These sections are again subdivided so that each member of the committee can most readily, without undue loss of time, visit the various hospitals in his district. Councillor Districts 12 and 13 will be inspected by Dr. Spohn of Elkhart; Councillor Districts 10, 11 and 8 (with the exception of Madison County) will be inspected by Dr. George D. Miller of Logansport; Councillor Districts 5 and 9 by Dr. Weinstein of Terre Haute; Districts 6, 7 and Madison County of District 8 by Dr. Sterne of Indianapolis; Districts 3 and 4 by Dr. Stemm of North Vernon, and Districts 1 and 2 by Dr. Hayden of Evansville.

In the event of it being considered advisable, two or more members of the committee, or even the committee as a whole, will make inspections of certain hospitals. It was further moved and carried that each member of the committee would be permitted to use his own discretion and judgment in calling to his assistance any member of the State Medical Association in good standing.

All reports of hospital inspections will be made out in triplicate; one copy to be sent to the American Medical Association, one to be retained for the files of the Indiana State Medical Association and the third for the files of the committee itself. The completed report is to be rendered to the Council on Medical Education of the American Medical Association about Feb. 1, 1920.

DR. ALBERT E. STERNE, Chairman.
DR. GEORGE D. MILLER, Logansport.
DR. W. H. STEMME, North Vernon.

INDIANAPOLIS MEDICAL SOCIETY

Meeting of the Indianapolis Medical Society at Washington Hotel, Tuesday, Dec. 2, 1919, was called to order by the president, Dr. C. F. Neu. Minutes of the previous meeting were read and approved.

Dr. Jobs, as chairman of the committee on Parking Ordinance, reported that a concession by ordinance on the part of the city council had granted a three hour period for parking the machines of doctors where offices were in the congested district. He submitted the official insignia of the American Medical Association and moved that it be chosen as the distinctive insignia to be placed on the doctors' cars.

Dr. J. R. Eastman read a paper on the "Operative Technic of Spina Bifida." Abstract follows:

The first step of the operation consists in the taking of every precaution against contamination of the wound. The importance of this cannot be overestimated, because the one imminent postoperative danger in spina bifida is meningitis from wound infection. Contamination is made especially dangerous since the

site of the wound not only lies often near the anal region, but because it also lies in the direct groove along which the infant's urine and feces are most likely to extend. With this in mind the writer places a piece of rubber dam over the tumor and its lower border is sutured with fine chromic catgut to the skin of the child's back. By reinforcing with collodion this suture line may be made water tight. The rubber dam is now turned downward and the second procedure begun.

This step consists of dividing the circular collar of true skin which is usually present about the base of the tumor. By employment of the scissors-spreading method of dissection, the circular incision through the skin at the base of the tumor may be made with little danger of escape of fluid. The neck of the sac is now exposed as is the neck of the sac of umbilical hernia in the Mayo operation, and is freed of all fat and connective tissue. The sac is now grasped between the rubber-covered jaws of a pair of light, delicate intestinal forceps.

With the neck clamped the sac is then opened by snipping it through the thinnest part, which is usually at the vertex of the tumor. If the sac be opened at any point by a very small incision which is enlarged by scissors-spreading dissection, cord and nerves may be saved from trauma. If, on opening the sac, it is found to be free from nerve elements, a stout ligature is applied under the clamp jaws, the sac is cut away and the clamp removed.

If the opened sac is found to contain cord or nerve tissue these structures may in some instances be removed by blunt dissection, while the light clamp is still in place to prevent escape of fluid and entrance of infection. If necessary the bony defect of the vertebral column may be enlarged to admit of such replacement. This removal of bone can be accomplished while the clamp is still applied.

After the neck of the sac is tied and the clamp removed, no attempt is made to close the bony defect by an osteoplastic operation. The danger of this step probably offsets the few and doubtful advantages it may provide. The muscles are drawn together over the stump of the sac and the skin wound closed with a continuous suture of fine chromic catgut, either transversely or longitudinally, depending on which is more easily accomplished. Hemostasis should be complete.

Procedures directed against wound contamination, which were begun by the stitching of the rubber dam to the child's back, are now completed. Collodion is applied over the wound line. Over this a strip of gauze is then placed and its edges glued to the skin with adhesive plaster straps. This gauze and adhesive plaster are then painted with the collodion solution, after which the rubber dam protective is drawn up, laid flat on the back and its three remaining margins glued to the skin as was the underlying gauze by adhesive plaster straps. Next a small triangular piece of adhesive plaster is so applied that a sharp point passes downward between the buttocks with the base of its triangle overlying the straps of adhesive plaster securing the lower border of the rubber dam. The adhesive plaster is then covered with collodion so that the zone of operation is sealed against infection by excreta.

CONCLUSIONS

1. Spina bifida associated with increasing hydrocephalus is inoperable.

2. Spina bifida associated with paralysis should be operated only for the purpose of preventing subsequent ulceration and rupture.

3. Rubber dam, stitched at one margin to the skin below the tumor, adhesive plaster and plentiful collodion should be used to prevent fecal and urinary contamination.

4. A light, rubber-covered clamp applied to the neck of the tumor is the safest method of preventing the loss of cerebrospinal fluid and also of excluding infection from the cord.

5. The sac can usually be tied off as in inguinal hernia.

Dr. S. Earp spoke his appreciation of the essay. Related a case he saw eight years ago with talipes varus. The tumor was as large as a grape fruit. This case was operated successfully and is now attending school with straight feet and is an intelligent child.

Dr. C. Ruddell said he appreciated the essay and was particularly impressed by the description of the rubber dam used for protection against infection. Said statistics would indicate these children should not be operated until they were one year old, but since most cases die earlier than that it would seem that these operations should be earlier. Said children in early months stand surgery better than at a later time. Believes those operated earlier will show a greater per cent. of recovery than those operated later. Spina bifida occulta is the one that should interest the general practitioner as they have only an abnormal growth of hair to indicate their presence. These cases should not be overlooked nor neglected.

Dr. Eberwein commended the use of the rubber dam and clamp described as very useful. Also thought well of the technic of the rest of the dressing. Said success in this operation is often defeated because the field is not well taken care of.

In closing Dr. Eastman said these babies should be operated as soon as born, or as soon thereafter as possible, they stand surgery well as they do not at this age receive pain impressions as they do later. Said those cases not amenable to the use of the clamp are not amenable to any kind of surgery. Has had no good results from the operation of any cases of hydrocephalus.

If there is part of the cord in the hernia nothing is gained by trying to reduce it and closing the hernial opening.

Meeting adjourned. Attendance 60.

DR. A. L. MARSHALL, Secretary-Treasurer.

FLOYD COUNTY

The Floyd County Medical Society at the regular annual meeting, held December 12, at the Tavern Hotel, New Albany, elected the following officers for the coming year:

President, Dr. F. W. Hazelwood, New Albany; vice president, Dr. J. H. Ashabranner, New Albany; secretary-treasurer, Dr. P. H. Schoen, New Albany (re-elected); censors, Drs. R. W. Harris, W. L. Starr, and J. W. Baxter, all of New Albany. Delegates to the annual meeting of the state association are to be appointed later.

At the conclusion of the regular routine business a banquet was given at which Dr. J. Y. McCullough, the outgoing president, presided as toastmaster.

Adjourned. P. H. SCHOEN, Secretary.

HAMILTON COUNTY

At the December meeting of the Hamilton County Medical Society the following officers for the ensuing year were elected: President, L. C. Baldwin, Westfield; vice president, C. R. Elfers, Jolietville; secretary, H. H. Thompson, Noblesville.

HENRY H. THOMPSON, Secretary.

JASPER-NEWTON

The Jasper-Newton Medical Society met with Dr. G. H. Vankirk at Kentland on December 12, with seventeen of the twenty-two members present.

Officers for the ensuing year were elected as follows: President, Dr. J. G. Kinneman, Goodland; vice president, Dr. E. N. Loy, Rensselaer; secretary-treasurer, Dr. O. E. Glick, Kentland; delegate to state association, Dr. A. R. Kresler, Rensselaer; alternate, Dr. Frank Kennedy, Goodland.

The topic for the evening was "Influenza." Dr. J. G. Kinneman presented a paper on "Etiology and Diagnosis," and Dr. Frank Kennedy read a paper on "Complications and Treatment."

Dr. Charles N. Combs of Terre Haute, secretary-treasurer of the Indiana State Medical Association, was a guest of the society.

On account of the absence of one-third of the members of this society during the war, and the heavy work of the men at home, regular meetings have been an impossibility for the past year and a half, but with a return of conditions to practically normal the indications are that the Jasper-Newton County Medical Society will be one of the most active in the state the coming year.

The following program for 1920 has been outlined: January, February and March will be devoted to a symposium on the diseases of the respiratory tract.

April, May and June to a study of the cardiovascular and renal system.

July, August and September to the diseases of the gastro-intestinal tract.

October, November and December will include those diseases coming under the nervous system.

January 30.—Host, Dr. Gwin, Rensselaer. Subject: "Etiology and Prevention of the Respiratory Infections, Including Coryza, Pneumonia, Influenza, Tuberculosis and Contagions Gaining Entrance Through Respiratory Channel," Dr. Charles Elliott, Chicago.

February 27.—Host, Dr. Martin, Mount Ayr. Subjects: 1. "Diagnosis and Treatment of Lobar Pneumonia with Its Sequela Empyema," Dr. Van Kirk. 2. "Treatment of Bronchopneumonia," Dr. Hemphill.

March 26.—Host, Dr. Rainier, Remington. Subjects: 1. "Diagnosis of Incipient Tuberculosis" (pulmonary), Dr. Kinneman. 2. "Treatment of Incipient and Also Advanced Pulmonary Tuberculosis," Dr. Larrison.

April 30.—Host, Dr. Washburn, Rensselaer. Subjects: 1. "A Study of Arterial Tension; Method of Taking, Significance of," Dr. Kresler. 2. "Prevention of Cardiovascular and Renal Changes," Dr. Besser.

May 28.—Host, Dr. Bassett, Goodland. Subjects: 1. "Etiology and Differentiation of Cardiovascular and Renal Changes," Dr. Gwin. 2. "A Study of Cardiac Diseases," Dr. Kennedy.

June 25.—Host, Dr. Besser, Remington. Subjects: 1. "Diagnosis of Renal Lesions," Dr. Mathews. 2. "Treatment of Renal Diseases; (a) Preventive Measures, (b) Chronic Nephritis Cases," Dr. Johnson.

July 30.—Host, Dr. Collier, Brook. Subjects: 1. "Cause and Prevention of Dietetic and Infectious Diseases of the Intestinal Tract," Dr. Loy. 2. "Acute Infections of the Intestinal Tract, Diagnosis and Treatment," Dr. Rainier.

August 27.—Host, Dr. English, Rensselaer. Subjects: 1. "Artificial Feeding Problems," Dr. Bassett. 2. "Management of Acute Enterocolitis of Infants," Dr. Glick.

September 24.—Host, Dr. Mathews, Kentland. Subjects: 1. "Diseases of the Upper Abdomen, Functional and Organic," Dr. Collier. 2. "Treatment of Gallbladder and Ulcers," Dr. Hewitt.

October 29.—Host, Dr. Hemphill, Rensselaer. Subjects: 1. "General Causes and Prevention of Functional Neurosis," Dr. English. 2. "A Classification of the Neuroses," Dr. Recher.

November 26.—Host, Dr. Kennedy, Goodland. Subjects: 1. "The Borderland Neurotic Cases; Treatment; Classification," Dr. Washburn. 2. "Functional Nervous Troubles of Women," Dr. Martin.

December 17.—Host, Dr. Kresler, Rensselaer. Subjects: 1. "A Study of Internal Secretions" (essayist selected). 2. Election of officers.

JOHNSON COUNTY

The Johnson County Medical Society held its annual indoor picnic and election of officers at the home of Dr. and Mrs. L. L. Whitesides at Franklin on New Year's evening, 1920. At 6 o'clock a delicious dinner was served by the wives and daughters of the members of the society, followed by an interesting program of music and readings.

Guests for the evening included Dr. S. C. Stanton and Dr. John M. Stahl, president and chief medical director of the Farmers National Life Insurance Company of Chicago, and Dr. and Mrs. Sherwood, dean of Franklin College.

Five new members were received at this meeting.

Officers for the ensuing year were elected as follows: President, Dr. O. C. Murphy, Franklin; vice president, Dr. J. N. Records, Franklin, and secretary-treasurer, Dr. Luke P. V. Williams, Whiteland.

Adjourned. LUKE P. V. WILLIAMS, Secretary.

LAKE COUNTY

The annual meeting of the Lake County Medical Society was held at St. Margaret's Hospital, Hammond, Thursday, December 11, Dr. Ostrowski presiding.

Mr. J. N. Coleman, architect for the proposed Lake County Tuberculosis Hospital, presented the plans for the institution and gave a detailed explanation of the same.

The secretary presented his report, covering the activities of the society for the past year. A resolution was presented at the request of the World Trade Association, calling for the adoption of the Meter-Liter-Gram system of measurement. Same was adopted.

Dr. Ostrowski, retiring president, presented a discussion of the Medical Fakery of Lake County. The doctor, through his ability to speak several languages, has collected a large amount of data, showing the ignorant among the foreign classes to be the prey of innumerable quacks and charlatans that infest the district. He also discussed the tendency of certain of the reputable practitioners to make guess work of insurance examinations for the foreign societies, showing that the Polish societies operating in the Chicago district lost \$200,000 last year through carelessness in examinations. His paper elicited an extended discussion.

Dr. Evans made a plea for more cooperation between the members of this society and the Indiana State Board of Medical Registration and Examination.

The Tuberculosis Hospital project was then brought up and after a liberal discussion, the following resolutions were unanimously adopted:

1. That the Lake County Medical Society does not recommend the plans as presented, for the reason that they do not provide adequate facilities, and that the

expenditure is beyond reason. It is recommended that the Board of Commissioners consult with the State and National Anti-Tuberculosis Societies relative to the hospital plans adopted by these societies.

2. That the secretary send a copy of this resolution to all the newspapers of the county.

The objection on the part of our society lies in the fact that an expenditure of more than \$200,000 will provide facilities for only 136 patients.

Election of officers as follows: President, E. M. Shanklin, Hammond; vice president, F. J. McMichael, Gary; secretary, E. E. Evans, Gary; censors, J. W. Iddings, G. H. Hoskins and J. C. Gibbs; delegates, E. E. Evans and W. F. Howat; alternates, A. J. Lauer and T. W. Oberlin.

Adjourned.

E. M. SHANKLIN.

MONTGOMERY COUNTY

At a recent meeting the Montgomery County Medical Society elected the following officers for the coming year:

President, Dr. W. F. Batman, Crawfordsville; vice president, Dr. H. W. Sigmond, Crawfordsville; secretary-treasurer, Dr. A. L. Loop, Crawfordsville; delegate to the state association meeting, Dr. W. T. Gott, Crawfordsville, alternate, Dr. Frank Dennis; delegate to district meeting, Dr. W. F. Batman, alternate, Dr. George T. Williams.

The Montgomery County Medical Society assembled in special session, out of respect to a deceased member, Dr. R. M. Foster of Russellville, adopted the following resolutions:

WHEREAS, God in His infinite wisdom has seen fit to remove from our midst one of our esteemed fellow-workers, Dr. R. M. Foster; be it

Resolved, That the Montgomery County Medical Society extend to the family their sympathy in the loss of the husband and father. In a time like this words fail us and we only can commend them to Him who doeth all things well.

To the son, who is preparing to follow in his father's chosen profession, the society wishes Godspeed and offers him their assistance at any time he may need it.

DR. FRANK DAVIDSON,

DR. HARRY WILLIAMS,

DR. A. L. LOOP, Committee.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1919, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

HOYT'S GLUTEN SPECIAL FLOUR.—A gluten flour containing protein, 80 per cent.; fat, 1 per cent., and starch, less than 10 per cent. This flour may be used when a diet relatively free from carbohydrates is desired, especially in diabetes. It does not make a satisfactory bread, but may be used to prepare muffins, flat cakes, or gruel. The Pure Gluten Food Co., Columbus, Ohio (*Jour. A. M. A.*, Dec. 13, 1919, p. 1843).

LACTIC ACID-PRODUCING ORGANISMS AND PREPARATIONS.—Fermented milks have long been used because they were palatable to many or because of an opinion among the laity and among physicians that they were advantageous in certain disorders of the gastro-intes-

tinal tract. A great stimulus to the employment of fermented milk was given by the theories of Metchnikoff regarding intestinal putrefaction, which are, however, entirely unsupported by scientific evidence. No one seriously subscribes to his opinions at the present time, but, on the other hand, there is evidence that the administration of sour milk products is at times beneficial. In pediatrics, fermented milk has found a wide application. By the use of acid-producing bacteria, milks of suitable composition may readily be prepared. For this purpose, bacteria of the Bulgarian bacillus group, usually in association with *Streptococcus lacticus*, have been found particularly satisfactory. There is little evidence showing that organisms of the Bulgarian group can be implanted in the intestinal tract. There is little evidence that liquid cultures of lactic acid organisms are of value as local application to mucous membranes or in arresting putrefaction or suppuration in wounds, abscesses or sinuses. Liquid cultures of lactic acid organisms, and still more the tablets, deteriorate with age. All such preparations must be stored in an icechest and should be marked with an expiration date after which they are not to be used (*Jour. A. M. A.*, Dec. 20, 1919, p. 1885).

LACTIC ACID FERMENTS.—In preparing the 1920 edition of New and Nonofficial Remedies, it appeared desirable to the Council on Pharmacy and Chemistry that careful reconsideration should be made of the use in medicine of lactic acid bacteria—and products prepared by means of these bacteria—in relation to practical therapy. A special committee consisting of a physiologic chemist (Lafayette B. Mendel, chairman), a pediatrician (John Howland), an internist (W. P. Longcope), a rhinologist (H. I. Lillie), and a bacteriologist (L. F. Rettger) took up the problem. A circular letter was sent by the committee to a large number of well known bacteriologists, clinicians and manufacturers who might be assumed to have experience or information bearing on the practical use of lactic acid bacilli. Based on the replies which were received, the committee has revised the discussion of "Lactic Acid-Producing Organisms and Preparations" which appears in New and Nonofficial Remedies. These replies showed that the bacteriologists and scientific laboratory workers show far less enthusiasm for the claims of lactic acid bacteria for a place in practical therapy than do the clinicians. It was the general opinion that the Bulgarian bacilli cannot be effectively implanted in the alimentary canal by feeding cultures thereof. The overwhelming preponderance was against the usefulness of cultures of the bacilli in infected sinuses, cavities, etc. The committee recommended that cultures of *Bacillus acidophilus* be not included in N. N. R. at present. The committee considers it important that the Council should continue its control of the viability and purity of cultures offered for sale (*Jour. A. M. A.*, Dec. 20, 1919, p. 1895).

BENZYL BENZOATE FOR THERAPEUTIC USE.—VAN DYK AND CO.—A brand of benzyl benzoate which complies with the N. N. R. standards. For a discussion of the actions, uses and dosage, see New and Nonofficial Remedies, 1919, p. 53. Van Dyk and Co., New York.

LUMINAL.—Phenobarbital — Phenyl-Ethyl-Barbituric Acid — Phenyl-Ethyl-Malonyl-Urea. Phenobarbital (luminal) differs from barbitol (veronal) in that one ethyl group has been replaced by one phenyl group. It is claimed that the introduction of the phenyl group increases the hypnotic power of luminal over that of barbitol. Luminal is claimed to be a useful hypnotic in nervous insomnia and conditions of excitement of the nervous system. Dose, from 0.2 to 0.3 gm., increased if necessary to 0.8 gm. Luminal is supplied in powder and as Luminal Tablets 1.5 grains. Winthrop Chemical Co., Inc., New York.

LUMINAL-SODIUM.—Phenobarbital Sodium—Sodium Phenyl-Ethyl-Barbiturate—The monosodium salt of

phenyl-ethyl-barbituric acid. The actions and uses of luminal-sodium are the same as those of luminal. For hypodermic injection luminal-sodium is used in the form of a 20 per cent. solution. The dose of luminal-sodium is 10 per cent. greater than that of luminal. Winthrop Chemical Co., Inc., New York.

SAJODIN.—Calcium monoiodobenenate—The calcium salt of monoiodobenenic acid. Sajodin is used as a substitute for iodides. The iodine of sajodin, being longer retained, is perhaps better utilized. It is also less liable to produce gastric disturbance than alkali iodides. Sajodin is also supplied as Sajodin Tablets 8 grains. Winthrop Chemical Co., Inc., New York (*Jour. A. M. A.*, Dec. 27, 1919, p. 1939).

PROPAGANDA FOR REFORM

THE NEW BACCHUS.—No longer should artists—at least, American artists—represent Bacchus astride a wine barrel: the little god should be depicted astraddle a "patent medicine" bottle. As every physician and pharmacist knows, there are on the American market a number of widely advertised and extensively sold "patent medicines" whose most potent ingredient is alcohol. The problem of controlling these alcoholic "patent medicines" can be satisfactorily solved in only one way, and that way is to prohibit the use of alcohol in preparations of the "home remedy" type, that is, in those products which are sold indiscriminately to the public for the self-treatment of disease (*Jour. A. M. A.*, Dec. 6, 1919, p. 1772).

ANTIMERISTEM-SCHMIDT.—A letter received by physicians from the "Bakteriologisch-Chémisches Laboratorium Wolfgang Schmidt" of Cologne, Germany, calls the attention of American physicians to Antimeristem-Schmidt. Antimeristem-Schmidt was rather widely exploited some six or seven years ago. It is a preparation claimed to be useful in the treatment of inoperable cancer and as a supplementary treatment after operation for cancer. The treatment has been found without effect and no license for the sale of Antimeristem-Schmidt has been granted by the U. S. Treasury Department and therefore its importation into this country is prohibited (*Jour. A. M. A.*, Dec. 6, 1919, p. 1787).

THIALION.—This is an heirloom of the days when lithium salts were supposed to be nature's antidote for all kinds of ailments supposedly due to excess of uric acid. The Council on Pharmacy and Chemistry reported in 1906 that it was not a definite chemical compound as suggested by the chemical formula published by the proprietor, the Vass Chemical Company, but a mixture consisting chiefly of sodium sulphate, sodium citrate and small amounts of lithia. In recent advertisements, Thialion is referred to as "A Non-Effervescent Lithiated Laxative Salt," "a non-hygroscopic, non-deliquescent, granular salt of lithia," etc., but the chemical formula does not appear, nor is any definite statement of composition furnished (*Jour. A. M. A.*, Dec. 6, 1919, p. 1789).

LUBRICATING JELLY.—The subjoined formula for an inexpensive lubricating jelly has been used in the German Hospital (now the Lankenau Hospital), Philadelphia, for a number of years: Tragacanth, whole, 3 gm.; glycerin, 25 c.c.; phenol, 1.5 gm.; distilled water to make 300 c.c. The tragacanth is broken in small pieces and put into a wide-mouthed bottle; the other ingredients are added and the bottle is frequently shaken (*Jour. A. M. A.*, Dec. 13, 1919, p. 1852).

THE PREVENTION OF SIMPLE GOITER.—O. P. Kimball, J. M. Rogoff and D. Marine publish their third paper on the effect of sodium iodid in the prevention of goiter in school children. They conclude that simple goiter in man may be prevented and that the method may be carried out as a public health measure. Two gm. of sodium iodid given twice yearly seems adequate for the purpose (*Jour. A. M. A.*, Dec. 20, 1919, p. 1873).

PURITYPOTENCYTRUSTWORTHINESS

CHARACTERIZE ALL OF

SQUIBB'S BIOLOGICALS

AS WELL AS ALL SQUIBB PHARMACEUTICALS AND CHEMICALS
 PARTICULARLY WORTHY OF NOTE FOR USE AT THIS TIME OF THE YEAR ARE

TYPHOID VACCINE

TETANUS ANTITOXIN

Which always should be used early, therefore kept
 on hand ready for immediate use.

ANTI-MENINGITIC SERUM (Polyvalent)

Equally balanced against all types of Meningococci.

DIPHTHERIA ANTITOXIN (Globulin)

Which is small in bulk for the number of units, as
 is also the Squibb Tetanus Antitoxin.

THROMBOPLASTIN (Containing all cerebral haemostatic substances, including Kephalin in full amount)

For local use and use hypodermically. Causes phys-
 iological clotting without danger of Thrombosis or
 of Embolism.

LEUCOCYTE EXTRACT (Is a Sterile Ex- tract of Healthy Leucocytes)

For use alone or with vaccines and serums. It in-
 creases Leucocytosis and Phagocytosis.

 Full Directions with Each Package



 Complete Literature on Request

E. R. SQUIBB & SONS, NEW YORK
 MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

80 BEEKMAN STREET



The Importance of Larger Doses

ONE in every ten cases of diphtheria in the United States terminates in death, according to the New York City Board of Health. This high death-rate can be materially lowered by the early administration of large doses of diphtheria antitoxin. The average dose employed at the present time is 5000 units. Authorities assert that it should be 10,000 units.

Physicians who get the best results from diphtheria antitoxin give large doses early in the course of the disease. They administer initial injections of ten to twenty thousand units in all suspected cases. There is little danger from big doses. This fact is generally conceded. The real risk lies in reliance upon too small doses.

Higher unit dosage is now possible. Parke, Davis & Company are producing high-potency antitoxin that is from three to five times more concentrated than the serum supplied several years ago. What are the advantages of this concentrated and refined high-potency antitoxin? There is less liquid to inject, absorption is more prompt, results are quicker and better, lives are saved which would otherwise be lost.

Ask your druggist for P. D. & Co.'s Diphtheria Antitoxin.

Parke, Davis & Company

DETROIT

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 2

FORT WAYNE, IND., FEBRUARY 15, 1920

PER YER, \$2.00
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES		PAGE	SOCIETY PROCEEDINGS		PAGE
Lipovaccines.	A. Parker Hitchens, M.D., Indianapolis....	41	Indianapolis Medical Society.....		68
The Surgical Treatment of Empyema by a Closed Method.	Arvine E. Mozingo, M.D., Indianapolis.....	46	The Council		69
Mastoiditis at Camp Taylor.	John Walter Carmack, M.D., Indianapolis	52	Miami County		70
			Shelby County		71
			Sullivan County		71
			Wells County		71
EDITORIALS			MISCELLANEOUS		
Fraudulent Advertising of Chiropractors.....		55	Deaths		63
The Professional Man's Income Tax.....		56	News Notes and Personals.....		63
Interview Your Legislative Candidates.....		57	The Truth About Medicines.....		71
Editorial Notes		57			

NEXT ANNUAL SESSION, SOUTH BEND, SEPT. 22, 23, 24, 1920.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS Second CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS OF MRCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103, ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

New
(7th)
Edition

PATHOGENIC MICROORGANISMS

New
(7th)
Edition

PARK & WILLIAMS

THE whole subject of Immunity has been entirely rewritten—it is 1920 technic you get here. This revision has been most extensive—the chapter on Media has been practically rewritten and utilizes the recent work on Hydrogen-Ion Concentration. The sections on Streptococci, Yeasts and Influenza Bacilli have been extensively revised. The information gained during the influenza epidemic upon bacteria pathogenic for the respiratory tract and during the last part of the war with preventive measures against typhoid fever, paratyphoid fevers and wound infections due to anaerobes, has been added. The chapter on Complement Fixation has also been largely revised. Splendid up-to-the-minute sections on Practical Application of Vaccines and Serum Therapy.

By WILLIAM HALLOCK PARK, M.D., Professor of Bacteriology and Hygiene, University and Bellevue Hospital Medical College and Director of the Bureau of Laboratories, Department of Health, New York City; and ANNA WESSELS WILLIAMS, M.D., Assistant Director, Bureau of Laboratories, Department of Health, Assisted by CHARLES KRUMWIEDE, JR., M.D., Assistant Director, Bureau of Laboratories; Assistant Professor of Bacteriology and Hygiene, University and Bellevue Hospital Medical College.

Octavo, 786 pages with 214 engravings and 9 page plates.

Cloth, \$5.50 net.

PHILADELPHIA,
706-710 Sansom Street

LEA & FEBIGER

NEW YORK
2 West 45th Street

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, South Bend, September 22, 23 and 24, 1920

OFFICERS AND COMMITTEES FOR 1920

President	CHARLES H. McCULLY, Logansport
1st Vice President	BUDD VAN SWERINGEN, Fort Wayne
2d Vice President.....	SAMUEL HOLLIS, Hartford City, Ind.
3d Vice President.....	CHARLES STOLTZ, South Bend
Secretary-Treasurer.....	CHAS. N. COMBS, Terre Haute

SECTION OFFICERS

Surgical Section—Chairman, James Y. Welborn, Evansville; Vice Chairman, M. R. Combs, Terre Haute; Secretary, H. O. Shafer, Rochester.

Medical Section—Chairman, Charles P. Emerson, Indianapolis; Vice Chairman, B. S. Hunt, Winchester; Secretary, Jane Ketcham, Indianapolis.

Eye, Ear, Nose and Throat Section—Chairman, John R. Newcomb, Indianapolis; Secretary, E. M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1920), Joseph Rilus Eastman, Indianapolis. Alternate, Miles F. Porter, Fort Wayne. For two years (term expires December 31, 1921), Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington.

COUNCILORS

Chairman, G. W. H. Kemper, Muncie.	
DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920
2d—J. B. Maple, Sullivan	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921
6th—T. S. Spilman, Connorsville.....	December 31, 1922

(See list of committees on page iv)

FREE

**Sterile
Specimen
Containers
Slides
Culture
Media and
Complete
Fee Table
on request**

Write or Wire

Clinical Laboratory Analyses

The kind of clinical laboratory work that commands respect

Wassermann and other complement fixation tests ...\$5.00

Autogenous Vaccines. In
single vials or ampules ..\$5.00

Lange Colloidal Gold test of
Spinal fluid\$5.00

Tissue Diagnoses. Frozen section, paraffin or celloidin \$5.00

ABDERHALDEN PREGNANCY and other
Abderhalden reactions.....\$5.00

MILK, FOOD, SANITARY AND TOXOLOGICAL INVESTIGATIONS

Accurate Analyses of All Secretions, Excretions and Body Fluids

ESTABLISHED BY
DR. M. HERZOG
DR. H. C. SWEANY
DR. MEYER D.
MOLEDEZKY
DIRECTOR

Laboratory of
PATHOLOGY AND BACTERIOLOGY
THE MOST MODERN EQUIPPED LABORATORIES IN THE U.S.

1130 MARSHALL FIELD ANNEX 25 E. WASHINGTON ST.

PHONE
RANDOLPH
6552-6553
CHICAGO
ILL.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., FEBRUARY 15, 1920

NUMBER 2

ORIGINAL ARTICLES

LIPOVACCINES *

A. PARKER HITCHENS, M.D.
INDIANAPOLIS

At the beginning of the war the value of typhoid vaccine in the prevention of typhoid fever was well known. Routine procedures had been adopted for the vaccination and revaccination of soldiers by all the armies of the civilized world and a mass of evidence had been accumulated which made such measures a military necessity. The addition of the paratyphoid bacilli was a detail which had been foreseen by several investigators. The high incidence of the paratyphoid infections in Europe in the early months of the war and in our own army on the Mexican border attested to the high specificity and value of prophylactic vaccination and resulted in the formulation of the triple typhoid or TAB vaccine.

The routine practice in the various armies was essentially the same; the vaccine was prepared by methods differing in technical details, to be sure, but it universally consisted of a saline suspension of the bacteria in question, two or three subcutaneous injections being given at intervals of from five to ten days.

The frantic haste with which men had to be mobilized in the Allied countries and rushed to the front made any delay a matter of the utmost seriousness. Investigations were begun, therefore, especially in France, which had for their object the discovery of means whereby the prophylaxis of the enteric fevers might be simplified and expedited. One of these investigations was conducted by Widal and Salimbeni.¹ Observing the effects of a reduction in the

number of injections with a corresponding increase in the size of the doses, they concluded that the entire treatment could be given in two doses instead of three, and that when there was great urgency the entire amount might be given in a single injection. While the reactions following a single dose were severe they were not more so than was sometimes observed following one of the injections in the routine three-dose treatment.

In the meantime, Le Moignic and Pinoy² had conceived the idea of suspending bacteria in oil, the thought being that with the slow absorption of the oil the antigenic substances would come in contact with the tissues slowly and permit the injection of very large doses with a minimum of reaction. They used a mixture of liquid petrolatum and lanolin in their earlier work but later adopted vegetable oils.

Achard and Foix³ reported almost simultaneously the results of similar work using olive oil. In this country, Whitmore⁴ and his co-workers at the Army Medical School in Washington demonstrated that when suspended in oil a number of bacteria equal to the entire saline three-dose treatment could be given in a single injection. Furthermore, having found that satisfactory antibody production followed the injection of the single dose lipovaccine there seemed good reason to substitute it for the saline vaccine for routine use in the army.

LIPOVACCINES WHICH HAVE BEEN PREPARED

The work of Le Moignic and Pinoy⁵ and of Achard and Foix⁶ was chiefly with typhoid vaccine. More recently a streptococcus and two

* Presented at the Indianapolis Session of the Indiana State Medical Association, September, 1919.

1. Widal and Salimbeni: *Presse med.*, Par., 1917, 25, 1.

2. Le Moignic and Pinoy: *Compt. rend Soc. de biol.*, Par., 1916, 79, 201, 352.

3. Achard and Foix: *Compt. rend Soc. de biol.*, Par., 1916, 79, 209.

4. Whitmore, Fennel and Petersen: *J. Am. M. Assn.*, 1918, 70, 427-431.

5. Le Moignic and Pinoy: *Loc. cit.*

6. Achard and Foix: *Loc. cit.*

mixed lipovaccines have been prepared for Levaditi⁷ by Lemaire. One of the mixed vaccines was composed of the staphylococcus and streptococcus; the other the staphylococcus, streptococcus and *Bacillus* of Friedlander. As an adjuvant to the treatment of infected war wounds these lipovaccines are said to have given excellent results.

Bossan and Le Moignic⁸ have prepared lipo tuberculins using suspensions of the tubercle bacilli and culture filtrates. They claim that these tuberculins are innocuous so far as local and general reactions are concerned and constitute efficient antigens.

At the Army Medical School much attention was given to the pneumococcus lipovaccine concerning which Fennel⁹ has reported. Under Whitmore's direction there were also prepared triple typhoid, pneumococcus, meningococcus, dysentery, cholera plague and influenza bacillus lipovaccines.

PREPARATION

Broth cultures and saline suspensions of bacteria from agar cultures are passed through a Sharples separator. The bacteria thus thrown out of suspension and collected as a thick pasty mass are transferred to Petri dishes and dried with the assistance of unslacked lime. Definite weights of the desiccated bacteria are placed in heavy pyrex glass jars together with steel balls such as are used in ball bearings. The jars are then revolved until the bacteria are reduced to a fine powder; this requires about twenty-four hours. To each jar is then added a mixture of lanolin and cotton seed oil, the amount of lanolin representing about 2 per cent. of the final volume. After mixing for from eight to twelve hours, sterilized cotton seed oil is added up to the volume calculated from the weight of dried bacteria in the jar. Enough chlorbutanol is added with the lanolin mixture to make 0.5 per cent. of the total volume.

After the final addition of the cotton seed oil the entire mixture is rotated in the grinding mill for from eight to twenty-four hours. The lipovaccine is then ready for sterility and potency tests.

Rosenow¹⁰ has suggested drying the bacteria after they have been mixed with the oil. The bacterial mass, collected from the Sharples centrifuge, is mixed in definite proportions with oil and the water is removed by vacuum accompanied by shaking and heat.

RESULTS OF INJECTION

Rabbits injected with a single dose of triple typhoid lipovaccine gave an agglutinin titre even higher than that obtained by the injection of the usual three doses of saline vaccine.¹¹ Young guinea-pigs injected with 1 c.c. of the vaccine showed resistance to living cultures injected ten days later. These results have been confirmed by Abe.¹²

After the adoption of the triple typhoid lipovaccine by the army many thousands of doses were given. I have not yet seen any report of typhoid occurring in men who had received the lipovaccine. It is well known that there were a few outbreaks of typhoid in various places but the earlier of these at least occurred in men who had received saline vaccine. The conditions under which these outbreaks occurred were such that our faith in the vaccine prophylaxis of the enteric fevers is in no way disturbed. We have, on the other hand, no basis for a comparison between saline and lipovaccines as to their ultimate value in the field. There seems no possibility of doubt, however, that the protection afforded by the lipovaccine was entirely satisfactory.

In the case of the triple pneumococcus vaccine it was rather expected that we should be able to make a satisfactory potency test by the immunization of mice, since the protection test for Type I antipneumococcus serum is, with reservations, so satisfactory. This hope has so far not been realized. The results reported by Whitmore, Fennel and Petersen¹³ show inoculated mice living after having received doses which were fatal to the controls.

In our own work we injected mice with 0.5 c.c. of the lipovaccine subcutaneously; after five and ten days three of them were injected with 1 M.L.D. of living Type I culture: after twenty days three were given 1 M.L.D. and three 10 M.L.D. All the mice died in about the same number of hours as the controls. In the case of the twenty-day mice those receiving 1 M.L.D. died before the controls.

Pneumococcus lipovaccine was used at Camp Wheeler by Cecil and Vaughan.¹⁴ They immunized about 80 per cent. of the entire command. A large number of these troops were new recruits who, as Opie¹⁵ has noted, are more susceptible to respiratory infections than are seasoned troops; in addition to this the epidemic

7. Levaditi: *Presse med.*, Par., 1919, No. 6, 49-51.

8. Bossan and Le Moignic: *Progres med.*, 1918, 23, 99.

9. Fennel, E. A.: *J. Am. M. Assn.*, 1918, 71, 2115-2120.

10. Rosenow: *J. Am. M. Assn.*, 1919, 73, 87-91.

11. Whitmore, Fennel and Petersen: *Loc. cit.*

12. Abe, B.: *Bull. Nav. Med. Assn. of Japan*, Tokyo, 1919.

No. 22, 4. Abs. in *J. Am. M. Assn.*, 1919, 72, 1330.

13. Whitmore, Fennel and Petersen: *Loc. cit.*

14. Cecil and Vaughan: *J. Exper. M.*, 1919, 29, 457.

15. Opie, Freeman, Blake, Small and Rivers: *J. Am. M. Assn.*, 1919, 72, 108-116.

of influenza complicated the situation. And again the work was interfered with by the commencement of demobilization in spite of which, however, the period of observation extended over a period of three months.

About the same number of cases of pneumonia of all types occurred among the 20 per cent. of the command which had not been vaccinated as occurred among the 80 per cent. of troops who had been vaccinated; that is, 363 among the vaccinated and 327 among the unvaccinated. At the same rate there should have been four times this number or 1,308 among the vaccinated. Excluding cases that developed within one week after the inoculation, that is before protection could be expected to have developed among the vaccinated men, and these were all secondary to severe attacks of influenza.

ADVANTAGES OF LIPOVACCINES

Single Dose.—To the military authorities the unhampered movement of troops is the thing of greatest importance, and the difference between a single dose vaccine and one which requires at least ten days is enormous. This one factor therefore justifies a preference for the lipovaccine.

One reason why prophylactic vaccination has not been more popular in civil life is that three injections are necessary. Every physician has had the experience of persons refusing to return for second and third doses. A single dose treatment, therefore, should make typhoid prophylaxis more popular among civilians and hasten the day when, in combination with sanitary measures, typhoid fever shall be eliminated.

A single dose prophylaxis would stimulate the wider use of vaccines for other infections. There was good reason for hesitation on the part of the army when it was suggested that troops be immunized against not only typhoid fever but also against pneumonia, cerebrospinal fever, dysentery, and cholera—to say nothing of the influenza complications.

Increased Dosage.—The number of bacteria required for the satisfactory prophylaxis of typhoid fever was worked out thoroughly by Colonel Russell. In the preparation of the typhoid lipovaccine therefore, the total number of bacteria contained in the three doses of the saline vaccine were consolidated into a single dose.

Other prophylactic vaccines had not been studied with the same thoroughness and in considering their preparation the necessary dosage was a matter of uncertainty. There was fur-

thermore the feeling that results were not always satisfactory and that the immunity they produced was of relatively short duration because the dosage was too low. The immunity following the use of pneumococcus saline vaccines in South Africa by Lister¹⁶ seemed to disappear after three months. Whitmore deemed it advisable to attempt the use of larger doses than it was believed the severe reactions would permit giving in saline suspension. It was found entirely practical to use a dose of pneumococcus lipovaccine containing 30,000 million pneumococci suspended in oil; i. e., 10,000 million of each of the three fixed types—Lister's maximum doses were 6,000 million of each type.

In the experimental lots of influenza bacillus vaccine we made at the Army Medical School, 1 c.c. contained approximately 100,000 million bacilli. The plague lipovaccine contained 10,000 million but observations made following its injection led us to believe it could have been much stronger without causing severe reactions.

Various observers (Castellani,¹⁷ Smith,¹⁸ Hitchens and Hansen¹⁹) have noted the fact that when several antigenic substances are injected together the tissues react to each individually; one antigen does not interfere with another. With the large doses possible in oil suspensions the prophylaxis of infectious diseases could be farther simplified, within reasonable limits, by combinations similar to the triple typhoid and the tripple pneumococcus vaccines.

Permanence.—Saline vaccines probably lose their potency through hydrolysis of their bacterial protein; this is hastened in some cases by the enzymes of the bacteria themselves. An essential to the hydrolytic change is the presence of water. Lipovaccines made with dry oils and containing dried bacteria should therefore remain permanent for an indefinite number of years. This is a point of great economic importance. It is now the custom to withdraw from the market all saline vaccines beyond a certain age and replace them with fresh products; much of the increased cost of producing lipovaccines would thus be neutralized.

Relatively Mild Reaction.—The lanolin used in the preparation of the vaccine, on account of its content in cholesterol is believed to neutralize the lipotropic toxic substances resulting from the splitting of bacterial proteins. It has

16. Lister, F. S.: Publications VIII and X, South African Inst. for Med. Res., 1916 and 1917.

17. Castellani: Brit. M. J., 1915, 11, 711.

18. Smith, G. H.: J. Infect. Dis., 1915, 16, 319.

19. Hitchens and Hansen: Am. J. Pub. Health., 1913, 3, 178.

been suggested that this is one of the reasons such enormous doses of bacteria can be administered when suspended in the oil mixture.

The detoxicating effect of the lanolin is not perfect, however; there is usually an initial period of intoxication following the injection of lipovaccine. While this reaction is usually mild, at times scarcely noticeable, it may be severe. It may come on within a very few hours but rarely lasts beyond twenty-four or forty-eight hours, and it depends largely on individual susceptibility, the same lot causing all degrees of reaction when a large number of people are injected. This reaction is undoubtedly due in part to the peptones and amino acids derived from the culture media.

This applies of course to subcutaneous injection. Lipovaccines should never be injected otherwise; intramuscular injections are not only likely to be followed by severe reactions but there is theoretically a danger of fat embolism—the latter is probably remote, however.

Slow Absorption: Resulting in Prolongation of the Immunizing Process.—When a saline suspension is injected its entire bacterial content comes rapidly into contact with the tissues and the resulting train of events begins and ends as a single wave with a narrow apex.

One of the fundamental ideas underlying the use of lipovaccines is that absorption of the oil is slow and the stimulation received by the tissues is thereby continued for a considerable period. If this is true the process would closely simulate the establishment of immunity by the disease itself, or the immunity obtained through the use of living vaccines.

This time factor is immunologically the most important point claimed for lipovaccines and it has apparently been accepted without much question.

Some recent observations make it appear that although the contact between the antigen and the tissues may be retarded, the delay is relatively brief. It is certain that the bacteria are removed from the oil within the first few hours after the injection, the pure oil alone remaining to be absorbed or assimilated slowly. In the histologic work done by Medlar at the Army Medical School on the local changes about the point of injection, it was constantly noted that the oil remaining in the subcutaneous tissues was quite clear; in other words, the bacteria had not remained in suspension as it was believed they should do.

Not very much attention was paid to this at the time. The army lipovaccines were not per-

manent suspensions even in their glass containers; they required vigorous shaking before use and one explanation for the relatively rapid clearing of the oil after injection was that the bacteria had merely settled out. Recently some lipovaccines have been prepared in which the bacteria show comparatively little tendency to sedimentation. But these vaccines injected into rabbits lose their suspended bacteria within twenty-four hours and one finds locally only perfectly clear oil. In an attempt to learn something about the reason for this, small amounts of lipovaccine were put into test tubes over various fluids; rabbit serum, undiluted and diluted, normal and immune, leukocyte suspensions, salt solutions of various concentrations, broth, distilled water, etc. The result was that with all but very concentrated salt solution the bacteria came down with relatively great rapidity and formed a layer between the oil and the fluid. In the incubator the lipovaccine placed above distilled water and physiologic saline solution was practically clear in about six hours, while the tube containing the lipovaccine alone showed practically no sedimentation.

Using strong salt solution instead of distilled water the sedimentation is very much delayed but after forty-eight hours the result is the same.

It is well known that when two immiscible fluids are brought together there is an exchange of soluble substances which continues until an equilibrium is established, each fluid then containing a proportion of the soluble materials depending on certain physical laws. This suggests that in the transfer of substances from the lipovaccine to the saline solution or water in a test tube or to the tissue juices after injection, the bacteria are carried down.

When injected subcutaneously the thin layer of oil surrounded by the constantly changing tissue fluids must lose its suspended particles within a very short time. It does not appear therefore that the rate of absorption of the oil itself has very much to do with retarding the absorption of the bacteria.

COMMENT

These matters are of minor importance since they deal chiefly with theoretical considerations compared with actual results in practice. When lipovaccines were adopted for use in the army this action was taken with a full realization of the fact that many problems connected with them still needed to be studied. For the military emergency the superiority of a single dose over the three injections at intervals justified their

acceptance after the questions of efficiency and freedom from danger had been answered satisfactorily. They did immunize against the enteric fevers and they are generally believed to have caused less reaction than the same dose suspended in saline solution would have caused. The lipovaccines are more permanent than saline vaccines and much larger doses of bacteria can be injected. Thus oily suspensions of bacteria offer us possibilities for the preparation of bacterial vaccines having certain qualities superior to saline vaccines.

Some of these properties have already been demonstrated and they indicate a further field for fruitful research. Certain difficulties have been encountered in laboratory investigations such as irregularities in antibody response and practically lack of response in the case of suspensions of pneumococci and streptococci in oil. Evidently oil preserves the antigenic value of certain bacterial species while in the case of others the effect is totally different. We are reminded of the fact that oleates will restrain the growth of Gram-positive bacteria while almost enhancing the growth of Gram-negative organisms—Avery²⁰ has called attention to the value of sodium oleate in the isolation of the influenza bacillus. May this point have something to do with the possible difference in relative efficiency between the lipovaccine containing the Gram-negative typhoid bacillus and that containing the Gram-positive streptococcus and pneumococcus?

These are merely a few of the many interesting problems revealed in this work. It is hoped that, within a short time, the necessary work before we can utilize the practical advantages of certain of the lipovaccines may be accomplished.

DISCUSSION

DR. HARRY K. LANGDON, Indianapolis: Dr. Hitchens' paper deserves the highest praise for it carries conviction. I have not been a strong advocate of lipovaccines, yet after hearing this argument I am almost persuaded. The true value of lipovaccines will only be established by the test of time. This I think is the attitude of the government, for while they required the use of lipovaccines during the emergency, on March 12th they issued a circular setting forth that saline triple typhoid vaccine and saline pneumococcus vaccine types I, II and III, would thereafter be used in place of the corresponding lipovaccines.

Four of the largest manufacturers of vaccines applied to the government for license to distribute lipovaccines. They were told they could, if they wished, prepare their product and if it met with the government requirements they would be granted simultaneous permission to market it. About the time the above-mentioned

circular was issued, these firms were told to destroy all of their lipovaccines. There are decided advantages and some disadvantages in the use of these preparations.

The greatest advantage derived from the use of lipovaccines is the single-dose inoculation, especially in an emergency, where large bodies of troops must be prepared for service in the shortest possible time. Each man is immunized by one injection, recovering from the reaction in two or three days, instead of three injections five to seven days apart. In civil life also more people would be immunized if it took only a single injection, for you all know from experience how many patients will not return for their second and third injections after they have had a severe reaction from the first.

There is no question, as Doctor Hitchens has shown, that the lipovaccines will not deteriorate as the saline preparations do. This is not only a point of economic importance, but one of convenience for the busy doctor.

Some difference of opinion exists as to the severity of the reactions experienced after the use of lipo and saline vaccines. My observation at Camp Taylor was that there was a larger percentage of severe reactions with the lipovaccines but that the degree of severity was little, if any, greater than with the saline preparations. The severity of the reactions, as Doctor Hitchens has said, is to some extent a matter of individual susceptibility and also depends largely on the depth of the injection. All vaccines should be given subcutaneously.

The slow absorption is of decided value in producing perfect immunity. If for any reason, mechanical or otherwise, the oil in the lipovaccines retards the absorption of the proteins, they are of greater value.

The greatest disadvantage that can be attributed to lipovaccines is their difficult production. The large commercial laboratories find it a difficult proposition, but the smaller laboratories, on which most of us are dependent for autogenous vaccines, have found it almost impossible.

There is little doubt that an autogenous vaccine, if the proper organism is isolated, is usually more beneficial than a stock vaccine. If we can get an autogenous lipovaccine prepared properly this difficulty will be largely removed. Rosenow, in *The Journal of the American Medical Association*, July 12, 1919, has described a method for preparing autogenous lipovaccines which simplifies the process somewhat, so that it may be carried out in the smaller laboratories.

Another difficulty is the proper sterilization of the oils in which the bacteria are suspended. This is not always successfully accomplished. The choice of the most suitable oil is still an unsettled question. The choice of a preservative

20. Avery, O. T.: *J. Am. M. Assn.*, 1918, 71, 2050-2051.

is also of importance, for most of our preservatives have a reduced bacteriologic power when mixed with oil.

Another little disadvantage in using lipovaccine is that our government will not permit their sale in interstate commerce.

The evidence from the reports of the work done so far seems to be in favor of lipovaccines, and when we are permitted to do so we will probably all use them. Then sometime there will be a day of reckoning, and our results will be checked up and the true value of these preparations will be settled.

DR. A. PARKER HITCHENS, Indianapolis: Questions are constantly being asked as to the relative value of lipovaccines and when they are likely to be made available for general use. It seems from the points brought out in what I have just said that we are scarcely ready yet. As stated, lipovaccines served a useful and valuable purpose when delay in the movement of troops was of such great importance. When this period had passed, the order you have just heard was issued and saline vaccines have been used since. More work needs to be done before we shall have conclusive evidence on many questions concerned with suspensions of bacteria in oil, and this work should be left to persons engaged in research. Only those who have adequate facilities for properly controlling their results should permit themselves to seek evidence on the effect of such products as the lipovaccines. It seems, therefore, that their use has not yet reached the province of the practicing physician.

THE SURGICAL TREATMENT OF EMPYEMA BY A CLOSED METHOD*

ARVINE E. MOZINGO, B.S., M.D.

INDIANAPOLIS

Captain, M. C., U. S. Army; Chief, Empyema Section
CAMP PIKE, ARK.

The great world war has done much to further the progress of medicine and surgery. Empyema has been one of the most discussed surgical subjects during the entire war period because of its unusual prevalence and high mortality.

The average mortality reported from various army camps during the winter of 1917-1918 was 30.2 per cent. One camp reported 84 per cent. in the series of eighty-five cases.

Lilianthal in an article on "Empyema" in the *Military Surgeon*, May, 1919, states that a mortality lower than 25 per cent. was considered good.

During the last eighteen months the writer has been engaged principally in empyema work at Walter Reed General Hospital, Washington, D. C., and at Camp Pike, Ark., and adopted what may be termed a closed method by which 138 cases, forty-five of which were acute, have been treated with a mortality of less than 2 per cent. The chief features of this method are:

1. A single, early, minor operation with trocarcannula, without danger of shock or collapse of the lung.
2. Intermittent removal of secretion and antiseptic treatment given through a small rubber tube with a bulb syringe.
3. Rapid partial sterilization with neutral solution of chlorinated soda (Dakin's solution) followed by complete sterilization with a 2 per cent. dilution of liquor formaldehydi in glycerin.
4. Maintenance of negative pressure in the empyemic cavity tending to early obliteration of the empyemic cavity.
5. One dressing which will last several days and no skin irritation or constriction of the chest.
6. Rapid permanent cures with small scars and seldom any chest deformity.
7. A greatly lowered mortality rate.

DETAILS OF METHOD

When fluid is suspected in the pleural cavity a diagnostic puncture should be made and if fluid is removed in which organisms are present, the operation should be performed immediately.

Under a local anesthetic a trocar cannula should be introduced into the eighth space post axillary preferable if fluid has been found here.

The trocar is removed and a 4 mm. seamless tube introduced into the cavity through the cannula, which is now removed.

The fluid may be removed by connecting the tube to a Potain aspirator or it may be removed by a one-half ounce bulb syringe. The cavity is then cleansed with Dakin's solution or normal saline, depending on the condition of the patient. The tube should extend from 8 to 15 cm. inside the cavity and have fenestrae 2 mm. in diameter every 2 cm. so as to completely empty the cavity. The tube should extend outside the chest about 15 cm. The end of the tube

* Read at the Indianapolis Session of the Indiana State Medical Association, September, 1919. Later read before District of Columbia Medical Society and Mississippi Valley Medical Association, Louisville, Ky.

should be capped with a rubber from a medicine dropper to decrease chances for contamination, and held on by a serrefine to maintain negative pressure. Tissue forceps and not the finger should be used in handling the tube.

The negative pressure established by the bulb syringe is sufficient to give maximum expansion to the lung and soon obliterates the cavity. The bulb syringe should always be used in preference to the glass syringe.

If the patient has an active pneumonia with high temperature, normal saline should be used for the first few days every four to six hours. Treatments are given usually every two hours by day and three hours by night. Once daily the cavity should be filled to about one-half the original capacity to prevent pockets from forming. As the condition improves, the Dakin's solution may be substituted for the saline.

The dressing is small and does not hinder free expansion of the chest. A No. 0 safety pin is thrust through the edge of the tube. Two pads 2.5 cm. square are placed one above and one below the pin. A 5 cm. pad is now threaded on the tube and held in place by four strips of adhesive each 5 by 8 cm.

After from two to fourteen days usual treatment with Dakin's solution, 2 per cent, formaldehyd in glycerin is injected into the cavity once daily following treatment with Dakin's solution. This treatment is usually continued from three to ten days.

Each patient should have his individual tissue forceps and bottle of Dakin's solution.

Smears and cultures should be taken only after vigorous agitation of the secretion in the cavity by quick compressions and expansions of the bulb, and no formalin used for at least twenty-four hours previous.

When the secretions have become a clear serosanguineous fluid and after negative smears and cultures for three successive days the tube may be removed. From 3 to 10 c.c. of formaldehyd solution should be left in the cavity when the tube is removed to act as a kind of rear guard to prevent recurrence. This solution and the resultant secretion will soon become absorbed. It is well to be governed also by the amount of secretions and sediment.

When the tube is removed care must be observed to prevent air from entering. The sinus is treated with iodine and then closed with adhesive.

Unfortunately the novelty of the Woulfe bottle wears away too soon. Regular and systematic breathing exercises with graduated calisthenics give quicker and better results.

Summary of the forty-five acute cases treated by the closed method: Number having a bronchial fistula, 8; number cases requiring secondary operation, 1; number of cases having secondary operation before closed treatment method was completed, 5; number bilateral cases, 4; shortest time tube was in cavity, 4 days; average time tube was in cavity, 25.2 days; number of cases who had tube less than fourteen days, 18; number of recurrences, none; number of deaths (a bilateral), 1; largest amount of pus removed at operation, 7,240 c.c.; average number of days patient in bed after operation, 7; number of cases having not over three dressings, 20.

The writer has treated ninety-three cases which had become chronic following other operations, by fixing a tube in the sinus and



Method of treatment. Tissue forceps, dressing, bulb syringe and bottle for Dakin's solution.

treating as if originally a closed method case. Forty-four of these cases had been operated by the open method and were on the average of three months' duration.

Perhaps the most remarkable result in any of these cases was that of a case operated by the open method overseas four months previous. There was a small sinus in high right anterior chest, with a profuse discharge. A small tube was inserted through the sinus and 660 c.c. of thick residual pus removed. The cavity was treated two days with Dakin's solution and two days with formaldehyd solution. The tube was then removed and sinus healed in three days. Three weeks later 150 c.c. yellowish fluid were aspirated from which smears and cultures were negative. The patient's condition was excellent up to two months later when trace of the case was lost.

This is a type of cases which usually falls a victim of a Schede or Eastlander operation.

The remaining forty-nine cases had been operated and treated at Camp Pike, Ark., by Diederick's method which is somewhat like the writer's but having many essential differences. Thirty-six of these cases were closed on an average of eight days by the writer's method. The remaining thirteen had complications and required longer time.

One bilateral case apparently doing well died suddenly. Necropsy revealed 274 c.c. blood in pleural cavity.

This method is clearly demonstrated by two reels of moving pictures. These reels are the property of the government and may be had gratis by any medical school or society by addressing The Curator, Army Medical Museum, Washington, D. C.

Captain Manson,¹ Chief of Surgical Service at Camp Dodge, Iowa, reported a series of twenty-three cases treated by the writer's method, and in the conclusion he states, "Our experience, we believe, justifies the opinion that the closed method thus described shortens the course of empyema since it maintains constant negative pressure in the pleural cavity, prevents the collapse of the lung, promotes early adhesions between the lung and pleural cavity and prevents secondary infections which are so common after thoracotomies. The simplicity of the technic, the minor character of the operation, the cleanliness and comfort of the patient and the economy of time and of dressings further recommend it as the ideal treatment of empyema so far devised."

Many reports have been received from doctors in civil practice using this method.

Dr. Wyman Whittemore, who has charge of the empyema work at Massachusetts General Hospital, stated in a letter to the writer that he had operated between seventy and eighty cases of acute empyema by this method with but five deaths.

Dr. Charles S. White of Washington reported ten cases with one death. Two of these cases were treated in the home by a nurse.

Dr. William C. Borden, Dean, George Washington University Medical School, reported five cases with no deaths. One of these was a bilateral case which he thinks undoubtedly would have died under any other treatment.

One report is not so flattering.

Major Dodge² of Camp Sherman, Ohio, reported three cases treated supposedly by the

closed method. These cases were very sick when operated on the ninth day after the onset of the pneumonia and large amounts of fluid were removed. In about three weeks the tubes were removed, the sinus soon healed but all three had a recurrence and a secondary operation. It was plainly evident the proper technic of the closed method was not followed, yet the method was condemned.

It is to be noted, however, that all three of these cases lived even though secondary operations were done, as compared to Major Dodge's mortality rate of 26 per cent. in sixty-eight cases by the open method. Yet Major Dodge would not only condemn the use of Dakin's solution in the pleura cavity but hasten back to the "pre-war methods" and as he so sarcastically says would "relegate to the boneyard all of the many fancy treatments evolved by the faddist who has been privileged to observe a series of cases for a limited period of time." The cases reported in this paper were held in the hospital for a reasonable length of time. Recent reports from over 90 per cent. of these cases show good general condition with no case of recurrence, therefore are not to be classified as "brain storm cures." It is the general opinion that those loudest in their condemnation of Dakin's solution are the ones most ignorant of its proper application.

When the empyema ward was closed at Camp Pike, Ark., there were two cases operated by the writer and ten chronic cases operated by other methods who either had complication or had not been under treatment sufficient time to effect cure. These cases were transferred to another hospital and had a secondary operation.

Major Stone,³ chief of the Medical Service of Fort Riley, Kan., reported 310 cases of empyema, 37 cases were cured by aspiration alone and 273 cases were operated by the open method. In the 273 operated cases there was a mortality of 48 cases, or 17.5 per cent. He also reports 100 deaths from empyema cases which as he states, "were not considered suitable risks for any kind of an operation except aspiration." The writer has never seen a patient with empyema too sick to be operated by the closed method, and he has operated at least ten cases which were considered nearly moribund when operated.

The presence of the army doctor at the necropsy table has done much to quicken his alertness in detecting empyema. There can be no doubt that many empyema cases go undiag-

1. Manson: Jour. Am. Med. Sc., August.

2. Dodge: J. A. M. A. (June 21) 1919.

3. Stone: Am. Jour. Med. Sc. (July) 1919.

nosed. In every pneumonia cases the doctor should be constantly on his guard for signs of fluid and not hesitate to make a diagnostic puncture. Osler says, "In pneumonia the practitioner should be on the alert if the crisis is delayed or the temperature rises after the crisis, if chills and sweats follow, or if the cough changes to one of paroxysmal type of great intensity."

The writer was graduated from Indiana University College of Medicine in 1913, served one year internship in the Methodist Hospital, Indianapolis; seventeen months in the Metropolitan Hospital in New York City, and one year private practice in Indiana, yet before he joined the U. S. Army, July 16, 1917, he never to his knowledge had seen but two cases of empyema. He is now convinced that the first case he had the misfortune to lose shortly after beginning private practice was none other than a case of empyema following measles and pneumonia. Consultation was held with a doctor who had enjoyed an extensive general practice for fifteen years or more and yet the poor unfortunate patient was sent to an early grave probably because of the combined ignorance of two incompetent doctors.

A law making compulsory, in every pneumonia death, necropsy by a county health officer in the presence of the attending physician and all other physicians interested would decrease the number of deaths falsely charged to pneumonia and help to rob that most dreadful disease of many of its terrors.

CONCLUSIONS

1. Early operation by the closed treatment method has the following advantages: (a) It can be done, regardless of the presence of acute pneumonia, without shock to the patient or collapse of the lung. (b) It provides complete evacuation of the empyemic cavity and relieves respiratory and cardiac embarrassment. (c) It provides perfect cleansing of the empyemic cavity and prevents absorption of toxins. (d) It lessens the usual thickening of the pleurae. (e) It prevents the lung, compressed by the exudate, from becoming fixed in compression. (f) It decreases the probability of complications usual in empyema.

2. The closed method is productive of great economy of time, labor and dressing material.

3. The closed method causes the minimum pain and discomfort to the patient and leaves no large scar or chest deformity.

4. In uncomplicated cases of empyema the patient are not kept in bed.

5. Cases treated by the closed method have fewer complications and are less likely to become contaminated or to have a recurrence.

6. Constant negative pressure gives maximum expansion of the lung and soon obliterates the cavity.

7. Uncomplicated cases of empyema treated by the closed method do not necessitate a secondary operation.

8. The postoperative treatment in greater part may be done by a properly instructed nurse.

9. The closed method is practical in the home and country practice.

10. Roentgenographic and bacteriologic laboratories, while always to be preferred, are not absolutely essential in treating empyema by the closed method.

11. Sterilization and closure are more rapid by the closed than by other methods, as the empyemic cavity is distended with the Dakin's solution and held in contact with all the infected pleurae until it has exerted its full bactericidal power.

12. Dakin's solution, because of its great solvent and bactericidal action, is the most nearly ideal solution to use in the preliminary treatment of empyemic cavity to dissolve the fibrinous exudate and partially sterilize the cavity.

13. Two per cent. dilution of liquor formaldehyd in glycerin is the best solution to use in the empyemic cavity after the preliminary treatment with the Dakin's solution, to shorten the course of treatment and decrease probability of a recurrence.

14. Smears and cultures after the formaldehyd solution treatment is begun will each show a rapid decrease in the number of bacteria. Occasional bacteria are found on the smears two or three days after the cultures become sterile.

15. Bronchial fistulae are more common than are generally suspected. With such a complication it is best to use salt solution in the cavity in such amounts as will not cause the patient to cough. The formaldehyd solution in small quantities can be used here to good advantage.

16. A hypochlorite solution of increased strength over Dakin's solution in both alkalinity and available chlorin can be used in the empyemic cavity with safety.

17. The available chlorin in Dakin's solution after injection into the empyemic cavity decreases very rapidly. The average strength after one minute is 0.38 per cent. and after five minutes, 0.07 per cent.

18. Dakin's solution can be made with sufficient accuracy from various commercial products by those who do not have the usual facilities for making and testing this solution.

19. The progress of the acute cases when less frequent treatments were given, indicates that cures can be effected in a little longer time by giving only two or three treatments daily with the Dakin's solution.

20. Most cases which have become chronic following an open operation can be cured by the closed method in a short time, making unnecessary a major secondary operation of the Schede or Eastlander type.

21. The dressing is small and does not constrict the chest.

22. The mortality in empyema cases treated by the closed method is lower than the mortality in empyema cases treated by any other method.

23. The results in every respect attained by use of the closed method are sufficiently striking to merit its more extended use.

24. The closed method can effect cures in acute bilateral empyema, with bilateral pneumonia present, both sides being operated at the same time which treatment is impossible by the open method.

721 K. of P. Building.

DISCUSSION

DR. FREDERICK A. TUCKER, Noblesville: After seeing these pictures there should be no question in the mind of anyone about the treatment of empyema, and the few of us who have had experience with empyema in the hospitals of the South in the winter of 1917-1918 can appreciate the value of this treatment. To my mind it is one of the greatest things that has been offered to the profession recently. The operation is simple and easy and there is no reason why any doctor should fail in using it.

DR. H. K. BONN, Indianapolis: My series of cases, using the closed method, is small when compared with Captain Mozingo's series. I was afforded an opportunity to use this method within a week after the publication of Dr. Mozingo's original article, and I have been so well pleased that I have continued the use of the method since that time. My results, following Captain Mozingo's plan, have been so superior to those I had been able to attain heretofore, that to me, this closed method seems ideal. I wish to congratulate Dr. Mozingo on his excellent work and to heartily endorse it.

DR. HARRY BOYD-SNEE, South Bend: I had an opportunity to see the first demonstration and the development of the closed method in the base hospital at Camp Pike as carried out by

Lieutenant Detrich. It was, as I remember, in February, 1918. It seems these two officers conceived at almost the same time the necessity of removing the contents of the pleural cavity, in a case of empyema, by the closed method, and the necessity of maintaining negative pressure. I believe Captain Mozingo was then stationed at the Walter Reed Hospital and, as I say, Lieutenant Detrich was in charge of the empyema service at Camp Pike.

Captain Mozingo has presented the subject without having called attention to the fact that there was a decided difference in the technic of the two operations. I believe Lieutenant Detrich's might be described as the indirect closed method, while that of Captain Mozingo might be called the direct closed method. The pictures showed the procedure and the technic of the direct closed method only, but I wish that Captain Mozingo in closing would give you the experience we had in the matter of postoperative complications as a result of the closed method, and not overlook the cases that required rib resection, and in which there were other postoperative complications.

DR. CHARLES M. MIX, Muncie: I think it is only fair to pre-war surgery in empyema to remind the state association that Dr. Maurice Rosenthal two or three years ago, at the meeting at Fort Wayne, called attention to the closed method of treating empyema and presented a special cannula, and although he did not treat the empyema cavity he presented a method which does not differ materially from the method presented by the essayist—simply inserting the cannula and passing a tube through it, arranging a very similar dressing and putting over the end of it a piece of thin rubber that would maintain constantly drainage and negative pressure. There was no treatment of the empyema cavity, but cases treated in that way in the hands of many surgeons in the state as well as by Dr. Rosenthal have yielded very good results, and I thought it was just as well to mention the fact that the war surgery in these cases is not entirely original. I think the paper was extremely convincing and this method of treatment surely merits very careful study.

DR. JOSEPH R. EASTMAN, Indianapolis: I do not think that the essayist would claim originality for this method. He no doubt would admit that Immelmann of St. Louis introduced a closed method some years ago, and he must also be familiar with the work of Dr. Maurice Rosenthal. Nevertheless, I think Captain Mozingo has placed the profession of this country under a debt of gratitude for the way in which he has perfected this method of dealing with empyema without a wide incision. Many of us have introduced small tubes under local anesthesia, but not with the consistent results that Captain Mozingo has had. I think

his work represents an advance and is a most interesting performance.

He makes a rather severe indictment of his colleagues in the surgical department of the army when he says that without his method there was a mortality of 30.8 per cent. That is a very discreditable comment on the thoracic surgery of the men in the camps, but without wishing to be cynical I would say this, that if the surgery on the thorax in the army was anything like that done by a certain man who operated in a certain hospital not more than a thousand miles from Indianapolis, a war camp hospital, I am not amazed at his statement, for this man did an open operation in two cases of hemothorax. I dislike to admit that 30.8 per cent. mortality would be a fair mortality for surgeons operating in the army hospitals of this country or in the ordinary, every-day practice.

But I do not wish to stand here in the position of detracting from the credit which is due Captain Mozingo. He has given us a description of a most useful trick in acute cases. When the pleura has become thickened I do not believe this little rubber bulb syringe will accomplish much by way of drawing the pleura out to the chest wall. In other words, I do not think it will establish negative pressure of sufficient degree to restore the contour of the pleura in very old cases, and I do not think that Captain Mozingo would claim that. In a case as old as six months I do not think this method would be so successful, because there is no longer efficient elasticity of the lung or pleura.

Let me speak of the old cases which cannot be dealt with by this method—let me tell you a very simple trick for these cases—cases three or four years old, where the pleura is as thick as one's hand. After an open incision and the removal of the thickened pleura, if one takes a long skin flap and employs the skin sliding method of Emil Beck of Chicago, pressing the point of the flap down into the depth of the wound, one will be surprised at the promptness of healing even in a deep wound. Pressing that long skin flap down to the bottom of the wound will in a large percentage of cases result in complete healing of a deep wound which without it might continue to discharge for years.

DR. G. B. JACKSON, Indianapolis: I want to commend the paper and to agree with the observations of Dr. Eastman in regard to the application of this method in the cases that are older than the acute cases. I would like to state that the percentage of cures by this method certainly suggests its adaptation wherever applicable. None of us has ever before claimed anything like the percentage of cures that the captain has seen with his method and he is to be congratulated. Having known of this method and being favorably impressed with the use of Dakin's solution, in a good many cases of chronic em-

pyema, I am still more impressed with his findings. I have made some clumsy attempts to do the same thing which he has so beautifully accomplished. In cases where I had resected and they did not get along nicely, I put in a large tube which fitted the wound snugly and then inside of that a long, flexible, soft tube. I pushed the larger tube in and then clamped it off up to the smaller tube, keeping the cavity filled with Dakin's solution, which I believe has something to do with the efficiency of this method. The captain is to be congratulated, for, whether or not this or that little point is original, on the whole it is an original method with wonderfully good results. I should like to ask the captain what the bacteriologic findings were in his case which was cured in four days.

CAPT. A. E. MOZINGO, Walter Reed General Hospital, Washington, D. C.: In regard to the ninety-three chronic cases we treated there must have been some of them with greatly thickened pleura, and they must have yielded to the power of that little bulb. The pull you get with that little bulb is amazing. I have gone into detail in a great many of these cases in a lengthy article which I hope will be published later in *The Journal of the American Medical Association*. One case was of six months' standing. That had been healed up for about four months and was under observation in another hospital. His sinus reopened while he was home on a furlough, and he was admitted to our hospital. We inserted a tube through the sinus and with that bulb we removed 750 c.c. of residual pus. In a few days he was cured permanently.

You perhaps have seen Dr. Diedrich's special trocar cannula. He has an arrangement in the end of the cannula which enables him to pass the tube up and over the rib. He claims there is a sort of valve action, but I think that is not true according to physics. On the other hand, it is quite difficult to insert the trocar in this indirect method. I saw this instrument used in two cases and it took the operator twenty-five minutes in both cases to insert the trocar. Then the periosteum was injured and consequently the rib became necrosed and had to be resected.

We have treated two very large gluteal abscesses, and in two days time they healed up. Most large abscesses could be treated in the same way.

I quoted the exact figures from this article by Dodge, which was published in *The Journal of the American Medical Association*. The mortality was 26 per cent., and I learned that three cases were added later, making the mortality over 30 per cent. One case died in the train while being transferred to another hospital; the other two before they were operated, and twenty-four cases are still unhealed. Lillenthal of New York claims a mortality lower than 25 per cent. may be considered good.

MASTOIDITIS AT CAMP TAYLOR*

JOHN WALTER CARMACK, M.D.

INDIANAPOLIS

It is not the purpose of this paper to take up the subject of mastoiditis with its detail of symptomatology, the technic of operation or the many problems of after care, but to give in a general way the result of the recent epidemic. The majority of the cases were in the hospital when their ear trouble began and for that reason it was our good fortune to be able to follow these from the first inflammation in the middle ear, with its attending symptoms and bacteriology, and with the close cooperation of the laboratory and roentgen-ray service to follow them through their otitis media to a recovery or a mastoid; later the operation and last but far from least the postoperative treatment.

Mastoiditis as seen in the army camps was of extreme virulence, assuming much more severe proportions than the average seen in civil life. The series of cases at Camp Taylor did not vary in their principal features from those in other base hospitals in this country. Between Oct. 15, 1918, and March 1, 1919, 220 mastoid operations were done. Cultures were taken from the mastoid wound during the operation in each case and the predominating organisms were found in the following proportions:

Streptococcus hemolyticus in 65 per cent.

Streptococcus nonhemolyticus, 15 per cent.

The remaining 20 per cent. was about equally divided between the staphylococcus, the pneumococcus and a diphtheroid bacillus of somewhat uncertain character, found frequently after the hemolytic streptococcus infection began to subside.

The interesting features of what might almost be called a mastoid epidemic are first, the etiology, and second, the early involvement and rapid destruction of the mastoid with very mild subjective symptoms.

The epidemic of influenza began about the middle of September and in three months over 10,000 cases had been admitted to the hospital. Otitis media, of a type peculiar to this epidemic, was a frequent complication and about 2,000 cases were treated by the otolaryngologic department during this time. In all otitis media cases cultures were taken when drum incision was done, and at the beginning of the epidemic the influenza bacillus was the predominating organism found, with an occasional one showing nonhemolytic streptococcus or staphylococcus. With this bacteriology present the otitis media

developed rapidly, producing a red thickened drum membrane, and within a few hours, in many instances, an effusion into the middle ear. These as a rule healed rapidly after free incision of the drum membrane was done, and measures instituted to continue free drainage and prevent secondary infection.

Mastoiditis did not complicate these early ear infections except in rare instances, although there was undoubtedly an involvement of the mastoid area by the influenza bacillus many times which did not produce suppuration, but which produced enough damage to allow a more severe infection later on. This conclusion was drawn from autopsy findings. Frequently, post-mortem revealed congestion of the mucous lining in the accessory sinuses, middle ear, and mastoid, where no objective or subjective symptoms had been present. In the entire number of mastoids only three cultures taken during the operation showed the influenza bacillus alone and it is very probable that in these other organisms were present, which for some reason were not found.

After the epidemic was fairly well established, there began to appear the hemolytic streptococcus in a rapidly increasing number of cases until nearly all cultures from the upper respiratory tract contained this organism. At this time the complications of influenza became severe and the middle ear infections spread rapidly into the mastoid antrum and cells, even with free drainage provided through the drum membrane. The condition of the mucous membranes from the hemolytic streptococcus was that of a severe inflammatory edema, the infection apparently spreading into the mastoid by continuity rather than a result of pressure, as drainage was provided by drum incision, frequently before there was effusion into the middle ear.

Coincident with the influenza there occurred an epidemic of measles and a limited number of scarlet fever cases. At one time there were 600 cases of measles in the contagious wards. This proved to be a frequent and immediate cause of middle ear and mastoid suppuration. Nearly one third of our cases were a direct result of measles, the chief infection again being the hemolytic streptococcus. The scarlet fever cases, while only a few in number, produced nearly as great a percentage of mastoids as did the measles.

The records show that the original cause of hospitalization in the cases developing mastoids were, first and most frequent, influenza; second, measles; third, streptococcic sore throat or tonsillitis; fourth, scarlet fever.

* Presented before the Marion County Medical Society.

Many of these cases, especially the influenza with hemolytic streptococcus and measles, had at the onset of mastoiditis or very recently varying degree of lung involvement, ranging from a bronchial inflammation to pneumonia and empyema. Repeated cases were operated with records resembling the following: Oct. 12, 1918, influenza; Oct. 28, 1918, measles; Nov. 2, 1918, pneumonia lobular, bilateral; Nov. 5, 1918, otitis media, acute suppurative right; Nov. 10, 1918, mastoiditis, acute suppurative right; Nov. 10, 1918, operation, mastoid complete right.

The pre-existing pathology in such a case made it a poor surgical risk and the question of when to operate a difficult one at times. The early tendency with these was to postpone the mastoid operation as long as possible, in order to give the patient time to improve generally. This method proved very unsatisfactory and even disastrous in a few instances, as the bone and tissue destruction was so rapid that more severe complications resulted. By far the most satisfactory results were had where operation was done as early as a diagnosis of mastoiditis could be made. Several cases were operated satisfactorily with active lung inflammation, measles and scarlet fever, where the symptoms indicated serious danger ahead. Even with this attempt to operate early, in more than half of the cases it was necessary to expose the sinus or dura or both, in order to remove all necrotic bone.

The anesthetic used in all cases with respiratory inflammation was nitrous oxid and oxygen whenever available; when not, a light chloroform anesthesia was used. The most satisfactory anesthetic from every standpoint was gas, properly administered, with a narcotic preceding. Two recently operated empyema cases developed mastoiditis, one bilateral, and were operated without noticeable shock or bad effect in any way. The mastoids resulting from hemolytic streptococcus were amazingly free from subjective symptoms. The patient was usually very toxic with a temperature ranging from 101 to 104 degrees, this depending largely on the pre-existing disease. Pain, which has been considered a prominent symptom, was so often absent or so mild that it was invaluable in diagnosis. Many of these cases had absolutely no pain, and very little if any tenderness on pressure, where bone destruction was very extensive. A few cases were seen complaining of severe pain, nearly all of which were found to have necrosis of the dural plate with some meningeal irritation or brain pressure. The freedom from pain has been a frequent subject of discussion

and has been ascribed by some to the toxemic lethargy. Another probable reason is, the rapid and complete tissue destruction provided a pathway for very free drainage through the middle ear and thus prevented pressure pain.

The aural discharge was very characteristic with the hemolytic streptococcus, being of a thin seropurulent nature usually tinged with blood and exceedingly profuse.

Swelling or thickening of the tissues over the mastoid area was present in many cases, and when so was a valuable aid in diagnosis. This varied from a slight swelling to a decided edema, and depended largely on the thickness of the external bony plate of the skull and the length of time mastoiditis had existed. In about one third of the cases no change could be detected.

The most valuable diagnostic sign and the one nearly always present was a thickening of the posterior superior wall of the external auditory meatus. This varied from slight boggiess of the tissues, always beginning near the drum membrane to a complete collapse of the canal. At times this was sufficient to obstruct the discharge from the middle ear and mastoid.

As an adjunct to the symptoms and physical findings the roentgen ray was used from one to several times in practically all cases. There were very few with physical evidence of mastoiditis that did not show some change, varying from a slight cloudiness to a complete obliteration of the cells. The roentgenogram was also valuable in establishing the outline of the mastoid area and the position of the sigmoid sinus. It was frequently inadvisable, however, with the hemolytic streptococcus infection, to wait for the plate to show decided changes on account of the rapid bone destruction.

As soon as possible after a diagnosis was made, operation was done, this in some cases being as early as seventy-two hours after the beginning of otitis media. No case was operated so early that we did not find considerable pathology. In fact, the mastoid infection at times seemed simultaneous with that of the middle ear, and the question was raised as to whether or not there might have been a primary hematogenous infection in the mastoid cells. It is probable that this is very rarely if ever the case, as a careful history usually elicited information pointing toward the usual origin. It was a striking feature of this series that nearly all gave a history of previous chronic or recurrent pathology in the upper respiratory tract. As a matter of deciding whether or not some of these cases would recover spontaneously, eight of the milder cases with hemolytic streptococcus infection, which had questionable

roentgen-ray findings were selected, placed in bed and given all the eliminative and supportive treatment accorded any infectious disease. All improved rapidly after the first three to five days in so far as their general condition was concerned, and in part the ear discharge stopped. The drum membrane healed completely in two cases. In less than four weeks every case developed an exacerbation necessitating operation. In one case with a normal temperature of ten days and an apparent disappearance of symptoms, a chill occurred suddenly. Operation was done within two hours and we found necrosis of the sinus plate with pus around the sinus. The operation done at Camp Taylor was a complete removal of the entire mastoid area. Great care was exercised in curetting out every possible cell so that no point of infection might remain. The mastoid tip was removed in 90 per cent. of the operations, as it is usually necessary in order to reach all the deep tip cells. The results obtained in healing time and infrequency of reoperation well repaid the care exercised and thoroughly convinced all concerned that anything short of a complete mastoid exenteration, when any part of it is involved, is poor and inexcusable surgery.

Twelve cases of chronic otitis media with intermittent suppuration developed acute mastoids and were operated. In each of these we found evidence of chronic mastoiditis. This, in a small way, adds to the evidence that most chronic discharging ears are really mastoids.

The principal direct complications following the mastoid infection were, first, cellulitis of the face and scalp; second, meningitis; third, septicemia from involvement of the sigmoid sinus.

The cellulitis occurred in ten or twelve cases and was of a peculiar edematous character, unlike an erysipelas, producing very little redness and pain. Frequent incisions of the scalp with microscopic examination of the fluid juices showed hemolytic streptococcus. All of these healed rapidly after several small scalp incisions were made to provide drainage. In most cases, however, the swelling extended over the entire head. Pus did not form in any instance.

Eight cases developed meningitis. In two the diagnosis was made before the operation. Six of these died, the other two becoming circumscribed with the formation of an intradural abscess; both of these recovered after the dura was opened and the abscess drained. Intraspinal and intravenous injections of antistreptococcic serum were used freely without noticeable results. The dura was opened for drainage

in two leptomeningitis cases without results. Postmortem findings indicated the origin of the meningeal infection to be through the thin, bony plate between the mastoid antrum and the dura.

In six cases thrombosis of the sigmoid sinus occurred. In three that were recovering from measles and pneumonia, the condition was present at the time of operation, and three occurred soon afterward. In all of these the sinus was opened, the clot removed from above and a section of the internal jugular vein removed. Two of these died and four recovered. It was the consensus of opinion from this limited experience that jugular resection done in as few hours as possible after any sinus involvement is the treatment indicated in this condition.

The mortality in the 220 cases was $5\frac{1}{2}$ per cent., the other deaths being due to the general septic condition.

The morbidity in this series was: (1) two complete facial paralyses; (2) one ear had less than 5/20 hearing, all others from 16/20 to normal on dismissal.

The average length of healing time was five weeks. After using dry dressings, bichlorid, saline and Dakin's solution irrigations and dichloramin-T in series of cases, over extended periods, it was decided that best results were obtained with gauze packing, saturated with a 3 per cent. dichloramin-T in oil.

A NUMBER of prominent medical men of this country are aiding and abetting the compulsory health insurance scheme which has been proposed by a lot of wild-eyed visionaries. The scheme is destined to work havoc in the medical profession, and it should be frowned on by every right-thinking doctor. At present we are asleep when it comes to the consideration of some measures that are advocated as a panacea for some of the ills of humanity, but which spell the death knell to medicine as a profession. The National Constitutional Convention of Germany approved compulsory public health regulations that will practically ruin the German medical profession. The fees which doctors in Germany will receive on behalf of assured persons will be not more than eight cents (8c) a visit. What has happened in Germany can happen in the United States, and we might as well buckle on some armor before it is too late and fight the threatened catastrophe. Incidentally, we owe it to the medical profession to set down on those of our members who are trying to carry into effect some Utopian dreams, and who, under any calamity to the medical profession, would not suffer themselves.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

FEBRUARY 15, 1920

EDITORIALS

FRAUDULENT ADVERTISING OF CHIROPRACTORS

FROM THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION we clip the following editorial:

A chiropractor is advertising in the Fort Wayne newspapers in such a way as to leave the impression among readers that he not only served in the late war as a chiropractor in connection with the medical department of the army, but after the armistice was signed was sent at government expense to perfect himself in "chiropractic spinography and spinal roentgen ray." We are reliably informed that the government never recognized chiropractic or any of the pseudomedical cults, and for any chiropractor to lay claim to such distinction is to play on the credulity of the public. Most if not all of the members of pseudomedical cults who served in the late war were privates and had no active work in connection with the treatment of sick and wounded soldiers. It is nothing short of the rankest imposition on an easily deluded public to lay claim to preferment that never was received, and it seems to us that the medical and surgical department of the army ought to have something definite to say concerning the subject."

Here we have a charge of fraudulent advertising baldly and boldly made. This paper is not informed as to the merits of the case and certainly cannot say that it has not given space to the advertising in question. If, however, it finds that it has and that the charges of the medical journal are correct, it will take pleasure in making that fact public. Here is an opportunity for the medical journal to make good and perform a real service for the public.—*Fort Wayne News and Sentinel*, January 29, 1920.

Concerning this matter, we have to say that the chiropractor under consideration has been advertising extensively in the Fort Wayne newspapers, telephone directory, and probably in several other ways in a blatant manner, and, as stated in our editorial note, "in such a way as to leave the impression among readers that he not only served in the late war as a chiropractor in connection with the medical department of the army, but after the armistice was signed was sent at government expense to perfect himself in "chiropractic spinography and spinal roentgen ray." If the editor of the *Fort Wayne News* will scan the numerous advertisements to which we have referred and some of which appeared in his own paper we believe that he will

agree with us that our charge is entirely correct. When a man says, "owing to injury received on duty with army medical department while in France I will be unable to resume my chiropractic practice before Jan. 2, 1920," and further states "I have served in base hospital in U. S. and hospitals in France," and, without refutation, has permitted the newspapers to publish news items to the effect that he has served as a chiropractor in the service, and while in government service was sent—at government expense—to a chiropractic school for so-called post-graduate study, it seems to us that the evidence points conclusively to the intent to convey the impression that chiropractic has been recognized by the government.

In connection with this discussion we reproduce a letter from the Surgeon-General's office in Washington which we believe effectually settles the question as to the recognition of chiropractic:

WAR DEPARTMENT
OFFICE OF SURGEON GENERAL
Washington

January 26, 1920

Major _____, M. R. C.,

Dear Major _____:

I am directed by the Surgeon General to acknowledge the receipt of your communication of January 1, inclosing a clipping from the Fort Wayne Journal-Gazette advertising section announcing the opening of a chiropractic office by one _____.

As you well know the Medical Department of the Army does not recognize chiropractic medicine, nor are graduates of schools of chiropraxy recognized or employed in any capacity by the Medical Department of the Army.

This office has no knowledge of any course of instruction conducted under the direction of the Government for the purpose of qualifying men for chiropractic medicine.

Very truly yours,

G. I. JONES,
Lieut.-Col., M. C., U. S. Army.

We have been informed that the chiropractor under consideration was a private in the service and had just about as much to do with the medical department of the army as any private who was detailed to dispose of the army hospital garbage. Aside from the fact that the advertising under discussion contains a number of falsehoods and mis-statements concerning the cause of a number of diseases or abnormal conditions, the indisputable nature of which is established, it is aiding and abetting an imposition on the public to permit such advertising in supposedly decent newspapers, thus falsely bringing the government in as a supposed supporter of such nonsense as chiropractic.

THE PROFESSIONAL MAN'S INCOME TAX

Figuring income tax is an easy job for the professional man. By education and training he is accustomed to drawing up statements. He has records of transactions involving income, and keeps well in touch with his expenditures.

Just what he is allowed to deduct as professional expense, in figuring his net income, is what he wants to know each year as the tax season arrives. Therefore, a review of the items in general is given in this article.

RETURNS FOR 1919

The present income tax law requires that returns for 1919 be filed on or before March 15, 1920, at the office of the collector of internal revenue for the district in which the taxpayer lives. At least one quarter of the tax due must accompany the return.

An unmarried person must file a return if his or her net income was \$1,000 or over; and a married person living with wife (or husband) must file if their joint net income was \$2,000 or over. A widow or widower, or a married person living apart from wife (or husband) is classed as a single person.

The requirement to file a federal income tax return is not contingent on there being a tax due.

Form 1040A is used for net income of not more than \$5,000; Form 1040 for net income over \$5,000. Instructions and a working sheet accompany each return form.

Every firm of professional men operating as a corporation must make an annual return of net income on Form 1120; if operating as a partnership, a return on Form 1065 must be filed.

GROSS INCOME

An individual's gross income from a profession includes all compensation for his services.

Where services are paid for with something other than money, the fair market value of the thing taken in payment is the amount to be included as income. If the services were rendered at a stipulated price, in the absence of evidence to the contrary such price will be presumed to be the fair value of the compensation received.

In the case of a salary received, this should be shown separately in Block B of the return. Many professional men and women—lawyers, medical examiners, teachers, accountants, etc.—are officers or employees of a state, or a political subdivision of a state, such as city, town or county. Their salaries or wages as such officers

or employees are exempt from the federal income tax. The exemption also applies to fees received by notaries public commissioned by states, also the commissions of receivers appointed by state courts.

As to fees for services to clients, patients, etc., these should be included in the gross income for the taxable year in which received, unless they are included when they accrue to him in accordance with an approved method of accounting followed by him.

CASH BASIS

A professional man may make his return on the basis of cash intake and actual expenditures for the year. It should be noted here that a taxpayer is deemed to have received income which has been credited to or set apart for him without restriction.

ACCRUAL BASIS

A more exact and equitable method of figuring net income is on the "accrual basis." This means a computation on the basis of income earned and expenses incurred, whether paid or not, that actually pertain to the taxable year, excluding income earned and expenses incurred in previous or succeeding years. A professional man who keeps books of account should make returns by this method, if his accounting method is one generally employed, and shows a correct net income.

DEDUCTIONS

A professional man may claim as deductions the cost of supplies used by him in the practice of his profession, expenses paid in the operation and repair of an automobile used in making professional calls, dues to professional societies and subscriptions to professional journals, the rent paid for office rooms, the expense of the fuel, light, water, telephone, etc., used in such offices, and the hire of office assistants. Amounts expended for books, furniture and professional instruments and equipment of a permanent character are not allowable as deductions.

In the deductions from gross income, the law specifically bars personal living or family expenses.

In the case of a professional man who has a regular place of business and who rents a residence, but incidentally receives there clients, patients or callers in connection with his professional work, no part of the rent at his home is deductible. If, however, he uses part of the house for his office, such portion of the rent as is properly attributable to such office is deductible.

BAD DEBTS

The uncollectible bills of professional men, particularly doctors, dentists and lawyers, have a very important bearing on the net earnings for each year. The principal point in connection with such accounts made in income tax procedure is that there can be no allowance for such bad debts in returns figured on the "cash basis." That is, a person who has been making his annual returns on the basis of cash received and actual cash expenditures each year has never shown as income his accounts with patients or clients, and is, therefore, not entitled to take them out of income.

On the other hand, a person who annually figured his gross income on the "accrual basis," that is, included his cash receipts and charges against patients and clients for all of his services performed during each year, is entitled to a deduction for "bad debts" covering such accounts as he ascertained during the year were uncollectible and charged off on his books.

An account merely written down or a debt known to be worthless prior to the beginning of the taxable year is not a proper item for deduction.

WEAR AND TEAR

A reasonable allowance for the wear and tear and obsolescence of such instruments and equipment, etc., is allowed. The proper allowance is that amount which should be set aside for the taxable year in accordance with a consistent plan by which the total of such amounts for the useful life of the property will suffice, with the salvage or scrap value, at the end of such useful life, to provide in place of the property its cost or its value as of March 1, 1913, if acquired by the taxpayer before that date.

OBsolescence

When through some new invention, or radical change in methods, or similar circumstances the usefulness in his profession of some or all of his instruments or other equipment is suddenly terminated, so that he discards such assets permanently from use, he may claim as a loss in that year the difference between the cost (reduced by reasonable adjustment for wear and tear, which it has undergone) and its junk or salvage value. If the apparatus was owned prior to March 1, 1913, its fair market value on that date should be considered, instead of its cost, in figuring obsolescence. This deduction is allowed by law, but the taxpayer must be able to substantiate any claim made on this basis. (Bureau of Internal Revenue.)

INTERVIEW YOUR LEGISLATIVE CANDIDATES

The Indiana primary elections will be held May 4, which is a little more than two months away. Before this month has expired, the campaign of candidates for all state offices will be on in full force. Indeed, a number of candidates already have announced their intention to seek certain offices and many others will make their announcements in the near future.

The primaries are of tremendous importance to the medical profession. Each member of the Indiana State Medical Association has a duty to see that he takes advantage of every opportunity which presents itself to explain the position of the profession toward medical legislation. We should make it clear to the candidates, especially the candidates for the Indiana Legislature, that we are not seeking a quarrel with the various schools of medical thought and practice. What we do insist on, for the welfare of the state, is that the high standards for medical education and practice be maintained. Our county medical societies should have committees on legislation appointed and at work whose primary duty is to interview all candidates for the Legislature and explain this fully to them. Individual members of our Association can do much toward this end. We are seeking nothing for ourselves that we do not grant to others. An individual responsibility rests on all of our members in this connection. We hope they will take advantage of the opportunity to explain our situation to prospective members of the Indiana General Assembly while the opportunity is here.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

HAVE you filed your income tax report? It is due on March 15, together with check for the first quarterly installment. No doctor is exempt from making a report, whether he has any tax to pay or not.

ACCORDING to the *Journal of the A. M. A.* there will be a rush of German physicians to this country after the signing of the peace treaty unless measures are taken by the authorities to refuse them a license to practice. This is a matter worthy of serious consideration on the part of the Association of Licensing Boards, and a firm stand should be taken.

THE LaPorte County Medical Society is getting out a neat little program each month announcing the monthly meetings and containing some bits of timely scientific notes, which is financed, apparently, by the advertising of local pharmacies, banks and men's clothing stores. It indicates that the LaPorte County society is "doing things," and the plan is worthy of adoption by other county societies.

At the recent meeting of the Council of the Indiana State Medical Association action was taken to close the Executive Office at 314 Hume-Mansur Building, Indianapolis, on Feb. 1, 1920. Mr. Frederick E. Schortemeier, who has held the position of executive secretary the past few years, will be retained as attorney for the Association, with offices located at 932 Lemcke Building, Indianapolis.

ISN'T it about time to suppress the exhibition of a lot of salacious and erotic moving pictures that are masquerading under the heading of eugenic films and have the endorsement of a coterie of so-called social and moral uplifters? There is an old saying that there is a time and place for everything, and sexual relations and their problems are worthy of better consideration than commercial exploitation at the hands of moving picture theaters.

IT is not too early to plan for this year's session of the American Medical Association to be held at New Orleans April 26 to 30. We are under the impression that hotel accommodations will be at a premium, and we suggest that those who know that they are going will do well if they engage their hotel accommodations in advance. Aside from the fact that the annual session of the A. M. A. always is worth attending there is the added attraction of a trip to New Orleans at a favorable season of the year.

WE are asked to remind doctors who served in the late war that by a new ruling the provisions for reinstatement of lapsed or canceled

War Risk insurance within 18 months after date of discharge upon payment of only two months' premiums still holds good. This insurance costs less than any old line insurance, and every doctor ought to take the limit. Also, according to a new measure recently enacted, policies have now been changed so that beneficiaries are paid the amount of the insurance in a lump sum rather than monthly payments as was formerly the case.

DELINQUENCY in the payment of dues to the Association began on February 1, but we are sending this number of *THE JOURNAL* to the delinquents for the purpose of calling attention to delinquency and urging for the last time that dues be paid at once. The loss of membership alone is not to be lightly considered, but the loss of the medical defense feature of the Association is a serious matter, for it may mean the loss of many hundreds of dollars for some luckless doctor who may be sued for malpractice for services rendered while not a member in good standing in our Association.

UNCLE SAM, through the Public Health Service, is looking after the health of the members of his family. Under the title "Uncle Sam's Guides to Health" are listed a large number of bulletins or leaflets prepared especially to help those who are ill to regain health and strength, and to stimulate interest in public health matters. These pamphlets deal with every conceivable subject from "The Rat Nuisance" to "Bottle Feeding for Babies." All of the commoner diseases, and especially those that exist in epidemic and endemic form, are discussed in separate pamphlets, any one of which may be obtained free by addressing the United States Public Health Service, Washington, D. C.

THE "flu" is with us again and as usual in epidemics of every kind numerous "sure cures" are peddled about in every afflicted community with no little profit to the exploiters. A year ago it was vaccines and serums which met with more or less approval of the medical profession. This year, with considerable skepticism on the part of the medical profession as to the value of vaccines and serums, the tide has changed and the charlatans are having their inning with proprietary remedies of every description, advertised without stint, and the latest humbug is the electric treatment "which destroys the influenza germs and puts vitality and resisting power into all the tissues of the body."

ON the first day of last December, the Association mailed to each county secretary the receipt book for collecting the 1920 dues, with instructions to personally solicit each 1919 member for this year's dues. This was a large order to fill, and cost the secretary no small item in time, telephoning, writing and visitation. The result February 1 was about two thousand renewals, but leaving almost six hundred delinquents. If you received a letter from the Association to the effect that you were one of these six hundred, don't register surprise and injured innocence, as most of you have been members long enough to know that dues are payable in advance, and reminders of this fact have appeared in the last two issues of *THE JOURNAL*. Will you help your secretary to get in the honor roll of the 100 Per Cent. Club if you have not already paid him?

THE expected epidemic of influenza has hit Indiana, but the disease for the most part is very much milder than it was last year. In fact there are very many good clinicians who are inclined to believe that the epidemic of this year is the old-fashioned la grippe minus the prostration and severe pulmonary complications. At all events up to the present time the death rate has been very low in consideration of the widespread prevalence of the disease. If there is any one thing concerning the disease that has been demonstrated to a certainty it is the necessity of giving the patient the benefit of the best hygienic conditions, good nursing, and little medication. Vaccines and serums for the most part have proved of little or no benefit, and patients who have done the best are those who have had plenty of reasonably warm fresh air, nourishing food, quiet, and only such medication as urgent symptoms indicated.

SOME of the medical journals are publishing requests—mostly from German-born physicians—for financial aid to be sent to what is called "our starving colleagues in Germany and Austria." The Good Book may say that we should "love our enemies," and "do good to them that hate us," but in view of the arrogance of the German physicians before the war, their brutality and hatred of us during the war, and their lack of repentance for their crimes since the war, we have about as much use for them as we have for rattlesnakes. The average doctor has about all he can do to keep his own head above water, and as time goes on and the various social and uplift societies secure

further legislation which compels him to work for nothing, or a mere pittance, he is going to have still rougher sledding. However, he is about as charitable as the next fellow, but if he has any alms to bestow on suffering colleagues let him give them to our colleagues in France and Belgium rather than Germany and Austria. Then, too, there are some doctors right at home who as a direct result of incapacity due to military service are fit subjects for charity.

WE are asked by the Federal Bureau of Public Health Service to help discharged disabled soldiers by publishing the fact that the government furnishes free medical, surgical, hospital and sanatorium care if the disability can be traced to service with the military or naval forces of the United States. The War Risk Act, recently passed by Congress, provides that men who served in the late war are entitled to free medical examination to determine the extent of their disability, and if found to be disabled the War Risk Bureau will pay them compensation according to the extent of the disability, and if the cases require it will direct that they be admitted to the most convenient Public Health Service Hospital or Sanatorium. The hospital furnishes artificial limbs, glass eyes, braces for deformed limbs, etc., free. It also examines the eyes to see whether glasses are needed, and looks after the teeth. In cases of tuberculosis or other diseases requiring like treatment, special sanatorium treatment is provided. Discharged, sick or disabled soldiers, sailors, marines and nurses are urged to write to the United States Public Health Service, Washington, D. C., for further details.

IT is surprising to note the number of physicians practicing medicine in Indiana who ought to either take some post-graduate work and get a little present-day knowledge into their craniums or else quit the practice of medicine. The editor of *THE JOURNAL* recently examined the small son of a doctor and recommended the removal of two enormous tonsils and a large bunch of adenoid tissue which were producing obstructed breathing and generally impaired health. The father promptly volunteered the information that, while he wanted the adenoid tissue removed, under no consideration would he have the tonsils touched because God had put them there for a purpose and they should not be removed. He failed to take into consideration the fact that God must have been pretty careless as well as partial in not treating

all children alike by giving them all huge tonsils and making them all confirmed mouth breathers. If an All Wise purpose governs the development of abnormal conditions, then why remove the adenoid tissue? However, it takes all kinds of people to make a world, and some of them are so conceited in their ignorance that it is folly to argue with them, though it is a pity that their ignorance and inconsistency is the means of working injustice to innocent persons like children.

AGAIN we desire to remind the readers of *THE JOURNAL* that it does not pay to buy drugs or surgical instruments because of their cheapness. Complaints have reached us to the effect that some firms, one or two located in Indiana, are offering special bargains in drugs and surgical instruments but that the quality of the goods furnished is very inferior. We hope that the readers of *THE JOURNAL* will appreciate our efforts to be of distinct service to them in trying to furnish trustworthy information concerning firms that are soliciting patronage from members of the medical profession. We are refusing the advertising of all firms that cannot stand close scrutiny of the goods they manufacture or their integrity. We feel that the readers of *THE JOURNAL* can make no mistake in patronizing our advertisers, but we are quite willing to do what we can consistently in determining the reputation of and the quality of goods manufactured by any firm that is soliciting patronage from members of the medical profession, whether such firms are advertisers in *THE JOURNAL* or not. Doctors for the most part are easily swindled, and they are not very prone to "look before leaping" when it comes to commercial dealings, but if we can be of any help in preventing them from becoming victims of firms that are trying to exploit the medical profession we shall be happy in furnishing the service.

PROBABLY every medical society in the state of Indiana has established a new fee bill, based on the present high cost of living. For the most part the charges for all medical and surgical services have been doubled or trebled over previous charges. This is especially true as concerns visits and office consultations. No longer will the country doctor charge \$1 for office calls and \$1.50 for visits in town. Neither will he take obstetrical cases at \$15 or give anesthetics for \$5. So far as we can judge from numerous fee bills that have been sent in, the minimum fees are as follows: Ordinary office cases, \$2; ordinary day visit in town, \$2.50; night visit, \$5;

ordinary obstetric fee, \$25; anesthetic fee, \$10; and other things in proportion, mileage being an additional charge when the visits are out of the city. We have maintained that the average doctor has been too poorly paid for his services and, while he has had no one to blame but himself, it has resulted in an interference with that independence and fine moral backbone which should be the conduct of every right thinking doctor. With decent fees and a growing appreciation of the necessity for rendering good services and expecting adequate compensation therefor, there should be a decided lessening of the demoralizing and dishonest practice of fee splitting or the selling of patients. But aside from all of this, the present high cost of living, applying as it does to every feature of the medical man's work, justifies the revision of the fee schedule that most of the Indiana doctors have been following.

MANY medical journals are discussing the possibility of making New York City the medical center of the world. There is no question but that this could be accomplished if the medical men of America's leading city would unite in so organizing and systematizing the teaching and clinical facilities as to make it possible to give the student what Vienna, before the war, was able to give him. The reason that Vienna was so eagerly sought by medical men desiring to do post-graduate work was because that medical center offered just what was required by any student, no matter what was desired. There were innumerable special courses given by experts and an abundance of clinical material for demonstration. Many of the men giving these special courses were either paid by the state or enjoyed an independent income which permitted teaching and original research work without the necessity of looking to private practice as a means of livelihood. It is doubtful if New York will be able to reach the mark set by Vienna and some other European medical centers, for while New York certainly has ample clinical facilities, it has not the men who are willing to do the painstaking and unremunerative work associated with post-graduate teaching, even though they possess the ability. What we really need to build up post-graduate study in this country is endowed institutions with all-time teachers and located in metropolitan centers where there will be no dearth of clinical material. The Rockefeller Foundation could be sponsor for such an enterprise, and it is hoped that some such means of establishing adequate post-graduate teaching may be found.

THE Christian Scientists of Seattle have attempted to abolish the school clinic which has been in existence for a number of years. They claimed that the school clinic was detrimental and injurious to the health in that the doctors experimented upon children and performed needless operations, some of which resulted in the death of the patient. When it was demonstrated to the court that many children, stunted in growth and mentally deteriorated by reason of defective teeth and the menace of diseased tonsils and adenoids, had been restored to health and put in the way of growing up to be useful citizens due to the clinic and the good work it has accomplished, then these agitators changed their complaint to the charge that the school board, under the laws, had no authority to maintain such a clinic. As stated by *North-west Medicine*, "It does, indeed, seem strange that any group of sane, level-headed citizens could have their judgment and viewpoint so warped by religious prejudice as to make a public onslaught on an institution, whose sole object is to benefit the community by curing defects in young children, the existence of which debars them from growing up physically and mentally into normal citizens. Such perverted attitude toward public health on the part of these men and women is difficult to comprehend in this twentieth century which we are accustomed to look upon as enlightened and progressive. It truly smacks of the ignorance of past generations, when the causes of diseases and the means of combating them were little understood and witchcraft and other superstitions controlled the minds of people in relation to physical and mental diseased conditions."

It doesn't pay to fool with federal demands or restrictions. You may laugh at your Uncle Sam's slow method of doing business and the illimitable "red tape" that surrounds all official acts, but eventually results are secured. Not a few doctors thought that the income tax did not affect them or that a little tax dodging would not be discovered, but now, four years after the income tax went into effect, Uncle Sam is just beginning to make every single doctor produce satisfying evidence that the income tax is being paid or why it is not being paid. Not only have the income tax investigations been a little embarrassing to some of the members of the medical profession as well as men and women in other occupations, but the penalties have been something to make the angels weep. In all probability there isn't a doctor in Indiana who

has not been subject to an income tax from the year 1914 up to the present time, and yet we are told that less than 25 per cent. of the Indiana doctors have filed returns. What a rude awakening awaits the 75 per cent. of the Indiana medical profession who have totally ignored the income tax law. Something may be saved by making returns now for the year 1919, and the report should be in the hands of the revenue officers by March 15. For those who are ignorantly deluding themselves with the idea that no report is required because of exemptions we desire to say that a married person with a gross income of \$2,000 and a single person with a gross income of \$1,000 must make a report even though exemptions cut the net income to a point below that required for taxation, and a penalty is fixed for failure to make such report. The government has only just begun to ferret out the slackers in the income tax business, and during the next year or two there are going to be many poorer and sadder but wiser persons.

DR. B. VAN SWERINGEN, a well known and highly respected surgeon of Fort Wayne, cards the newspapers with a complaint to the effect that an Indianapolis health and accident insurance company has failed to pay a claim on the ground that the illness for which claim was made occurred while the policy holder was in military service, though the company had no hesitation in accepting premiums from the policy holder while in service. Dr. Van Sweringen says that such a company is not a safe company to do business with and he, therefore, desires to give the facts publicly. We are inclined to believe that if more people who are imposed on by insurance or indemnity companies would publicly make known the fact there would be a little less trickery practiced by such companies. In reality the large insurance and indemnity companies usually deal with their policy-holders and the public in an eminently fair and satisfactory manner. However, there are many companies—most of them small and of the mushroom type—that practice all sorts of petty deception and trickery in order to avoid the payment of obligations. Usually these companies are able to carry on their questionable practices through exceptions or technicalities which are skillfully woven into their contracts, but in not a few instances a very evident intention to defraud is present and exercised through a knowledge that almost every individual considers litigation too troublesome and expensive to engage in. More and more are

we inclined to the belief that indemnity insurance of every kind should have no strings tied to it and no loop holes through which a scaley company can crawl. Dr. Van Sweringen's warning is, therefore, appropriate and should serve the purpose of teaching the value of patronage bestowed on trustworthy companies, and more especially the necessity of being acquainted with all of the terms and conditions of any policy that may be purchased of an indemnity company and any exceptions to the same that may exist.

DOCTORS have been doing a lot of howling about self-drugging and the increase in the sale of proprietary remedies, but it seems to us that they have no one to blame but themselves for the present tendency on the part of a large portion of the public who resort to self-medication. Not a few but many doctors tell their patients to go to the drug store and get some aspirin for a little headache or aching, and it is not surprising that aspirin is advertised in the daily papers with the glowing announcement that it is a remedy that has received the endorsement of the medical profession.

Then there are doctors who think they are doing a real service when they lecture to Red Cross societies and take part in home nursing courses to the extent of advising how various diseases are to be treated, and top off their inconsistent harangue by giving a number of pet prescriptions which every woman in the audience proceeds to write down and make use of, wisely or unwisely—usually the latter—at every opportunity.

The old saying that "a little knowledge is a dangerous thing" holds true for the most part in the practice of medicine, and when the members of a mothers' club, a home nursing club, or a social uplift organization of some kind get it into their heads that they know a whole lot about treating disease because some prominent doctor has filled them up with a bunch of pet prescriptions, those women are very likely to be a dangerous proposition in their immediate communities. It is entirely proper to educate the public concerning the simple things that can be done to alleviate sickness and suffering, but it is positively dangerous to attempt to teach the public how to use drugs intelligently.

Furthermore, there is absolutely no reason why the patient should know what kind of medicine is being prescribed for him by his physician or what can be expected from it. The doctor who boasts of his frankness in letting his patients know everything that is being done, and

all about the kind and quantity of medicine that is being prescribed for his patients, is doomed to meet with a good deal of criticism from his patients who are made pupils in a superficial study of medicine, and the patients themselves are done an infinite amount of harm through the acquisition of a knowledge that seldom is used intelligently.

IN one sense the increase in the charges of trained nurses from \$25 to \$35 and \$40 per week may be justified, for we realize that nurses have to pay the increased cost of wearing apparel and everything else that is purchased, but in another sense the decided boost is not justified because the nurse is furnished board and lodging while nursing, and in reality it is the cost of food which enters most largely in the drain on incomes. Then, too, this demand of some trained nurses that duty shall consist of eight hours only at one stretch is "rubbing it in" a little too much for the good of the nursing profession. Scant wonder that there is a demand for a lowering of the nursing standard, which is being met by certain nurses' training schools requiring about one third or one half the time formerly required to complete the course. The "practical nurse" also is becoming more popular, and to add to the woes of the trained nurse the public is beginning to take more kindly to hospitals for any and all kinds of sickness, merely as an economic measure. In fact hospitals are now full to overflowing with many patients who would remain in their comfortable homes except for the exactions and demands of the trained nurses. The average family cannot afford trained nurses at the advanced rates, and many families cannot pay the faithful doctor anything but the most modest fees, and all too often the doctor charges his account to charity, whereas the trained nurse seldom if ever renders services without being adequately paid. Nursing is a noble profession, but it is disgraced by those nurses who refuse to take only the easy cases, who make unreasonable exactions as to conditions of service and who on the whole make their work purely a matter of convenience, comfort and profit to themselves. Good nurses are appreciated and should be well paid, but they should consider the duty involved in caring for the sick and suffering who not always can be classed with the easy cases when requiring a nurse's care and are not always wealthy enough to afford two or three nurses, on eight-hour shifts, at \$35 and \$40 per week. We have the greatest admiration for the well trained, conscientious and faithful nurse, and we will aid

her in securing appropriate compensation and reasonable treatment from those who employ her, but we believe that the growing objection to so many trained nurses who are commercializing their profession is thoroughly justified. Nursing associations can do nothing better for the nursing profession than to purge its membership of those who evidently are trying to find out how much the sick can be penalized.

DEATHS

VICTOR KNAPP, M.D., aged 61, died at Huntingburg January 11. He was graduated from the Medical College of Ohio, Cincinnati, in 1881.

JOHN M. LITTLER, M.D., Indianapolis, died January 19, aged 72 years. He was graduated from the Kentucky School of Medicine, Louisville, in 1876.

STEPHEN H. HURST, M.D., Laconia, died January 13, aged 63 years. He graduated from the University of Louisville, Medical Department, in 1889.

JOHN W. MERRY, M.D., Mt. Airy, 77 years of age, died Jan. 1, 1920. He was graduated from the University of Michigan Medical College, Ann Arbor, in 1869.

FRANK C. STEWART, M.D., Indianapolis, aged 66 years, died Jan. 1, 1920. He graduated from the Hahnemann Medical College and Hospital of Chicago in 1868.

LEWIS CALVIN EMENHISER, M.D., Chicago, died January 31, aged 32. He was graduated in 1915 from the Chicago College of Medicine and Surgery in Chicago.

L. E. MADDOX, M.D., of Montpelier, a former Wells County man, died January 15, aged 68 years. He graduated from the University of Michigan Medical College, Ann Arbor, in 1875.

GEORGE AUGUSTUS SIGLER, M.D., Indianapolis, died January 18, aged 73. He graduated from the Bellevue Medical College of New York in 1875. Death was due to injuries sustained in an accident six years ago.

G. R. GREEN, M.D., aged 68, died at his home in Muncie, January 24. Death was due to pneumonia. He was a member of the Delaware County Medical Society, the Indiana State Medical Association and the American Medical Association.

CLAUDIS G. BARTLETT, M.D., Lewisville, died December 28, aged 64 years. He was graduated from the Medical College of Ohio, Cincinnati, in 1877, and was a member of the Henry County Medical Society and the Indiana State Medical Association.

LUELLA M. SCHNECK, M.D., Indianapolis, died January 20, aged 53 years. Dr. Schneck was graduated from the Medical College of Indiana, Indianapolis, in 1895, had been practicing medicine in Indianapolis for many years, was attendant physician at the Indiana Girls' School at Clermont for eight years, and was a member of the Marion County Medical Society and the Indiana State Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. D. S. LINVILL has been appointed Whitley County's government compensation physician.

DR. W. J. MELLINGER, Wheeling, has sold his practice in that city to Dr. E. B. Miller, Chicago.

DR. CARLTON B. McCULLOCH of Indianapolis has announced his candidacy for the governorship of Indiana.

DR. OLIVER P. FORD has removed from Rising Sun to Centerville where he will locate for the practice of medicine.

DR. RALPH ARNOLD, recently returned from military service, has opened offices with Dr. Heller in Greenfield.

DR. HARRY KNOTT has been appointed U. S. medical examiner for Marshall County for all soldiers of the world war.

DR. E. P. BUCHLEY, Jeffersonville, underwent an operation for appendicitis on January 12 at the St. Edward's Hospital.

DR. E. W. RINE was appointed county physician for Randolph County by the county commissioners in their session on January 5.

At a recent meeting of the board of county commissioners of LaPorte County, Dr. C. B. Danruther was appointed county physician.

DR. CHARLES B. GUTELIUS, Indianapolis, recently returned from military service, has gone to New York to take special work in surgery.

S. A. SHOEMAKER, Bluffton, has returned from Battle Creek, where he has been recuperating for several weeks after his recent illness.

DR. HANSON S. GIFFORD has opened offices in Suite 11 on the second floor of the Martz block, Tipton, for the practice of medicine and surgery.

DR. W. C. HEILMAN, formerly of Hope, has removed to Newcastle to become a member of the staff of physicians at The Newcastle Clinic.

DR. CHARLES MILO GIBBS, Greenfield, recently returned from military service, has resumed the practice of medicine with offices at 403 East Main street.

DR. JAP F. SWAYNE, formerly of Mecca and recently returned from military service, has permanently located in Clinton for the practice of medicine.

DR. HUGH CABOT of Boston has been appointed chief surgeon at the University of Michigan, Ann Arbor, and began his duties the first of this year.

ST. ELIZABETH HOSPITAL, Lafayette, is to be enlarged in the near future. A new wing 170 feet long will be built as an addition to the present large structure.

EMERY MARVEL, M.D., second vice president of the American Medical Association, died January 8, following a surgical operation at his home in Atlantic City, N. J.

DR. JAMES W. BENHAM, Columbus, recently returned from military service, was operated Monday, January 12, for appendicitis. At last report he was doing nicely.

At a session of the Gibson County commissioners held January 6, Dr. M. L. Arthur of Patoka was appointed county coroner, succeeding Dr. A. H. Rhodes, resigned.

DR. TROY EARHART, head surgeon of the Ancon Hospital, Canal Zone, who has been visiting his parents in Mulberry for the past two months, returned to the hospital January 9.

THE subscription price of the *Ohio State Medical Journal* has been raised from \$2 to \$3 per year. The marked increase in the cost of publication has necessitated this advance.

CHRISTIAN R. HOLMES, M.D., dean of the medical department of the University of Cincinnati, died in the Post-Graduate Hospital, New York City, January 9, aged 62 years.

DR. FRED A. METTS, Bluffton, has been appointed the United States public health physician for Wells County, to look after soldiers or nurses in the world war who were sick or disabled.

A WRITTEN dismissal of the manslaughter charge against Dr. Frederick Kreuger of Richmond was approved by Judge Gause of Muncie and returned to Richmond. The case will be dropped.

DR. H. W. MACDONALD of the Newcastle Clinic has recently been appointed surgeon for the Big Four railroad for the vicinity of Newcastle. He succeeds the late Dr. O. J. Gronendyke.

THE Hope Methodist Hospital, Fort Wayne, is defendant in a \$10,000 suit brought by Dr. W. W. Barnett of Fort Wayne for the death of his wife in an elevator accident at the hospital some time ago.

THE Pathological Building of the Johns Hopkins Hospital group was destroyed by fire on January 12. It is said that none of the valuable specimens were lost, nor were any of the records of research work damaged.

DR. S. L. MCKINNEY of Huntingburg has been appointed by the government as public health examiner of Dubois County. His duties will be to examine and treat disabled service men of the recent world war.

THE National Conference on Concrete House Construction, which meets in Chicago February 17 to 19 inclusive, is to discuss the housing problem from the standpoint of clean, sanitary and healthful permanent homes.

DR. GEORGE L. PERRY, Portland, left January 4 for New Orleans where he entered the post-graduate hospital for a special course in medicine. He expects to spend a short time in Florida before returning to the north.

DR. HARVEY H. KOONS of Newcastle and Izetta Harrigan of Bloomington were married January 20 at the county clerk's office in Bloomington. They will make their home in Newcastle where Dr. Koons is engaged in medical practice.

DR. HARVEY B. DECKER announced his marriage to Miss Evelyn Medlin, of Indianapolis, at the home of her parents in Brazil on New Year's Day. The ceremony was performed Saturday, October 18, in Chicago but was kept secret until New Year's Day.

SECRETARY COMBS announces the official membership report for the Indiana State Medical Association for the year 1919 to be as follows: Membership Jan. 1, 1919, 2,563; died, 41; removed, 10; delinquent, 207; new members, 1919, 154; membership Jan. 1, 1920, 2,459.

A MARINE hospital in Manila, P. I., is to be founded under the direction of the government. This will be the first hospital in the Orient to be used exclusively for men of the U. S. merchant marine and will make Manila one of the chief ports of call for all vessels from the States.

DR. J. M. BEAUER, wife and daughter, of Indianapolis, have gone to Los Angeles for the winter. Dr. Berauer will be associated during the winter months with Dr. J. F. Stewart, surgeon of Los Angeles, and expects to do special work at the Los Angeles Post-Graduate School.

OFFICIALS of South Bend have appropriated \$1,000 for the use of the Visiting Nurse Association in fighting the influenza epidemic. The money has been transferred from the general

fund to a special relief fund which is under the jurisdiction of the comptroller and board of health.

MARY E. CHRISTIAN, Indianapolis, a nurse in the United States army for fifteen months during the war and a graduate of the Registered Nurse Graduating School in 1913, was appointed to the newly-created position of county health nurse by the county commissioners on Thursday, January 10.

At a recent meeting of the farmers of Clinton County several resolutions were passed expressing the disfavor with which the new rate schedule of the doctors was received. The farmers oppose the system of charging a flat rate schedule by mileage, thereby discriminating against the farmers.

At a meeting of the state board of medical registration and examination held January 13, the following officers were elected for the coming year: Dr. J. M. Dinnen, president; Dr. W. A. Spurgeon, vice president; Dr. M. S. Canfield and Dr. W. T. Gott were reelected treasurer and secretary, respectively.

ON June 7, 1919, an addition was made to the second codicil of the will of the late Ner Black in which a bequest of \$1,000 was made to the Miami County Hospital to become a permanent endowment fund, the interest to be used for hospital purposes. This sum is to be paid to the hospital trustees by the executor as soon as possible after the death of the testator.

BIDS for the construction of the new Wabash County Hospital were opened at Wabash on January 21, but the contract was not let, as the lowest bid was approximately \$13,000 higher than the estimated cost. The hospital board announced that the bids would be taken under advisement and an attempt made to have county council make an appropriation sufficient to cover the deficit.

ACCORDING to a letter sent out by Rupert Blue, Surgeon-General of the U. S. Public Health Bureau, the general death rate in the United States has been reduced from 17.6 to 14.2 in the last twenty years. In other words, had the conditions of twenty years ago prevailed during the year just passed some 350,000 more persons would have died than actually did die. This represents a truly enormous saving of life.

THE records of the Indianapolis city board of health and the Indiana state board of health show that deaths in Marion County from tuberculosis decreased from 607 in 1918 to 472 in 1919. The figures also show that deaths in Indianapolis decreased from 518 in 1918 to 431 in 1919. This decrease has mainly been effected through the efforts of the Marion County Tuberculosis Association and is a very great credit to that institution.

At a meeting of the physicians and dentists of Marion, held Tuesday night in the rooms of the Association of Commerce, committees were named from both professions to take up the question of an office building. Arrangements are being made either to erect a new building or to purchase one already constructed. This movement has been under consideration for some time, but was culminated by a sudden rise in the rent rates in the city.

IN order that they may be better fitted to perform the duties required of them, the superintendent of the Northern Indiana Hospital for Insane has organized a class in mental training for the attendants of the institution. The course, which commenced early in November and will continue throughout the winter, is conducted by members of the medical staff; from one to three lectures are held each week in the amphitheater of the Pathological Building.

UNDER orders of the superintendent of the Northern Indiana Hospital for the Insane, the more than 1,000 inmates and attendants of the institutions have been vaccinated for smallpox. While no cases of smallpox have developed either among the inmates or the attendants, the order was given as a precautionary measure. The daughter of the storekeeper of the hospital was confined to her home with smallpox and a spread of the disease was feared from this source.

SURGEON-GENERAL RUPERT BLUE of the United States Public Health Service has started a campaign here in America to reach all the boys of America between the ages of 15 and 20 years and interest them in a campaign to keep themselves physically fit. Surgeon-General Ireland of the Army and Surgeon-General Braisted of the Navy have endorsed this work and are aiding in it. It also has the backing of the Y. M. C. A., churches, welfare organizations and educators throughout the United States.

STATISTICS show a marked drop in the death rate from certain causes following the legal prohibition of alcoholic beverages. The number of deaths from alcoholism in the city of Boston for the months of July, August and September, 1919, was only seven as compared to 31, 46, 38 and 34 for the corresponding period of the four preceding years. Accidents and suicides also were markedly decreased. Attention is called to the fact that the saving of life from these causes probably far exceeds the number of deaths from wood alcohol poisoning.

DURING January the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion with New and Non-official Remedies:

Gilliland Laboratories: Pasteur Anti-Rabic Vaccine-Gilliland: Pneumococcus Vaccine Immunizing-Gilliland.

Eli Lilly and Company: Chloroxyl.

Parmele Pharmaceutical Company: Chinosol and Chinosol Tablets.

E. R. Squibb and Sons: Thromboplastin Hypodermic-Squibb.

Winthrop Chemical Company, Inc.: Veronal-Sodium.

BIRTHS in Indiana decreased 5,027 during 1919 from the number recorded in 1918, according to statistics of the state board of health. The total number of births for 1919 was 58,690 and for 1918, 63,717. There were 5,197 births in the state for the month of December, with a state birth rate of 21.2 per cent. December deaths totalled 2,931 with a state death rate of 11.9 per cent. Influenza cases were reported from twenty-seven counties and caused thirty-three deaths during the month. There were ninety cases reported from all sections of the state. The death rate of pneumonia was 132.7 per cent. for December.

At the meeting of the Indianapolis Medical Society, held January 6 at the Hotel Washington, the following officers were elected for the coming year: Dr. James H. Taylor, president; Dr. Max Bahr, vice president; Dr. Robert Repass, second vice president; Dr. Leslie H. Maxwell, secretary-treasurer. Dr. C. H. McCaskey, Dr. Thomas J. Dugan, Dr. A. L. Marshall and Dr. W. B. Kitchen were elected delegates to the state association convention, and Dr. Edgar Kiser, Dr. Frank E. Abbott, Dr. Larue D. Carter and Dr. C. F. Neu were elected alternates. Dr. Raymond C. Beeler and Dr. T. Victor Keene were elected counselors of the society.

RUPERT BLUE, Surgeon-General of the Army, has been requested by Charles F. Sheridan, head of the service division of the American Legion at Indianapolis, to take over the base hospital at Fort Benjamin Harrison, which was evacuated last fall, and use it as a sanatorium for the treatment of tubercular former service men. The hospital has a capacity of 800 beds. Since much of the necessary equipment is already at the hospital, and since there are large numbers of tuberculosis patients in the state of Indiana who are not receiving hospital treatment, it does seem that this hospital should be utilized for at least the temporary treatment of tuberculosis patients.

A DELEGATION of members of the Alpha Kappa Kappa medical fraternity spent a day recently going through the Chicago plant of Armour and Company, the guests of Lester Armour. A special program was arranged in their honor, and they were shown through several departments which are not on the regular visitor's route, but which were considered of special interest to them as medical men. Of particular interest were the U. S. Government Inspector's Office, where Dr. J. H. Wheland explained the activities of the Bureau of Animal Industry; the chemical laboratory, where Dr. Frederic Fenger told of the important part played by chemistry in the meat product industry, and the medical department, where Dr. V. S. Cheney, medical director, described the Armour plan in safeguarding the health of all employees.

THE United States Civil Service Commission announces that a large number of physicians are needed for employment in the Indian Service, the Public Health Service, the Coast and Geodetic Survey, and the Panama Canal Service. Both men and women will be admitted to examinations, but appointing officers have the legal right to specify the sex desired when requesting the certification of eligibles. Entrance salaries as high as \$200 a month are offered, with prospect of promotion in some branches to \$250, \$300 and higher rates for special positions. Further information and application blanks may be obtained from the secretary of the U. S. Civil Service Board at Boston, New York, Philadelphia, Atlanta, Cincinnati, Chicago, St. Paul, St. Louis, New Orleans, Seattle or San Francisco, or from the U. S. Civil Service Commission at Washington, D. C.

THE following announcements concerning the New Orleans session of the American Medical Association, April 26 to 30, will be of interest to Indiana physicians who are planning to attend

the meeting: The Josephine Hutchinson Memorial Building, the home of the Tulane University School of Medicine, will house the Registration Bureau, the Information Bureau, the Association branch postoffice, and the scientific and commercial exhibits. It will also provide meeting places for three of the sections. The following hotels have been designated as the general and the various section headquarters for the session: Practice of Medicine, St. Charles; Surgery, General and Abdominal, Grunewald; Obstetrics, Gynecology and Abdominal Surgery, Grunewald; Ophthalmology, Monteleone; Laryngology, Otology and Rhinology, Monteleone; Diseases of Children, St. Charles; Pharmacology and Therapeutics, Planters; Pathology and Physiology, Planters; Stomatology, Lafayette; Nervous and Mental Diseases, Lafayette; Dermatology, De Soto; Preventive Medicine and Public Health, De Soto; Urology, St. Charles; Orthopedic Surgery, Grunewald; Gastro-Enterology and Proctology, Lafayette; General Headquarters, Grunewald.

THE American College of Surgeons, at its annual meeting held in New York City in October, formally accepted from interested fellows both in and out of Chicago, the gift of a fine residence in Chicago to be the permanent home of the college. The property was purchased at a cost of \$100,000, and the following description of same is taken from the report of Dr. Franklin H. Martin, secretary general of the college:

The property which has been purchased for the college is located on the northeast corner of Cass and Erie streets. The building faces Erie street and is a block and a half west of the main driving thoroughfare, Lake Shore Drive, with a two-minute bus service from and to the loop center; it is one block east of North State street, with a through line of trolley cars; it is less than a mile from the most distant loop hotel; it is a five to ten minute walk from the loop. The lot has a frontage of one hundred and fifty feet on Erie street, and a depth on Cass street of one hundred and nine feet. It occupies the southwest one-fourth of the block, giving the building a south and west exposure. The present building, occupying sixty-five feet of the lot and extending its full depth, was built thirty years ago at a cost in excess of four hundred thousand dollars. The building has a three-story and basement elevation, and is constructed of steel, Bedford stone, bronze, and marble; it presents the dignified appearance of a building erected for semi-public and semi-business purposes, is thoroughly fireproof throughout, and is eminently suitable for the purposes of the college. The present owners have within the past ten years spent a considerable sum of money in adding a new heating plant, an up-to-date lighting system, and other modern improvements. There is sufficient vacant space on the property to meet our future needs, including the Memorial Hall, and in case of extraordinary expansion additional ground may be secured.

THE Midwinter Conference on Public Health and Legislation, called by the Council on Health and Public Instruction of the American Medical Association, will be held Thursday, March 4, in the South Parlor of the Auditorium Hotel, Michigan Boulevard and Congress street, Chicago. The program is as follows:

Morning.—1. Call to Order, 9:30 a. m. 2. Chairman's Address, Dr. Victor C. Vaughan, chairman, Council on Health and Public Instruction, American Medical Association. 3. Secretary's Report, Dr. Frederick R. Green, secretary, Council on Health and Public Instruction, American Medical Association. 4. "Standardization of Public Health Activities," Dr. George E. Vincent, president, Rockefeller Foundation. 5. "Standardization of State Public Health Organizations," Dr. Charles V. Chapin, commissioner of health, Providence, R. I. 6. "Standardization of Municipal Health Organization," Dr. Allen McLaughlin, Assistant Surgeon-General, United States Public Health Service. 7. General discussion, opened by Dr. C. St. Clair Drake, commissioner of health, Springfield, Ill., and Dr. Ennion Williams, commissioner of health, Richmond, Va.

Afternoon, 2 p. m.—Symposium on Health Education of the Public.—1. "Health Education in the Public Schools—Thirty Years' Experience in Michigan," Dr. Victor C. Vaughan, Ann Arbor, Mich. 2. "Health Education and Activities in Colleges and Universities," Dr. John Sundwall, director, Students' Health Service, University of Minnesota, Minneapolis, Minn. 3. "Health Education a Function of Municipal Health Departments," Dr. Haven Emerson, New York. 4. "Health Education a Function of State Health Departments," Dr. W. S. Rankin, secretary, State Board of Health, Raleigh, N. C. 5. "Health Education a Function of the Federal Government," Dr. Charles V. Bolduan, director, Division of Public Health Education, U. S. Public Health Service. 6. General discussion, opened by Dr. John M. Dodson, Chicago; Prof. W. B. Owen, superintendent, Chicago Normal College.

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County Secretary	Date
1.	Decatur, C. R. Bird.....	Feb. 1, 1920
2.	Fayette, R. H. Elliott.....	Feb. 1, 1920
3.	Franklin, E. M. Glaser.....	Feb. 1, 1920
4.	Fulton, A. E. Stinson.....	Feb. 1, 1920
5.	Jasper-Newton, O. E. Glick.....	Feb. 1, 1920
6.	Jefferson, O. A. Turner.....	Feb. 1, 1920
7.	Marshall, Harry Knott.....	Feb. 1, 1920
8.	Posey, John Ranes.....	Feb. 1, 1920
9.	Shelby, F. E. Bass.....	Feb. 1, 1920
10.	Sullivan, J. B. Maple.....	Feb. 1, 1920
11.	Union, J. D. Shonwald.....	Feb. 1, 1920
12.	Warrick, J. F. Samples.....	Feb. 1, 1920
13.	Washington, Claude B. Paynter.....	Feb. 1, 1920
14.	Wells, G. B. Morris.....	Feb. 1, 1920
15.	Whitley, H. M. Egolf.....	Feb. 1, 1920

INDIANAPOLIS MEDICAL SOCIETY

Tuesday, Dec. 9, 1919

Meeting was called to order by the president, Dr. C. F. Neu. Minutes of the previous meeting were read and approved. Dr. R. Chappell reported for Dr. Jobs that the police wished the professional card of the physician placed on the inside of the windshield. This is to aid them in carrying out the revised traffic regulations.

Dr. Wynn called the attention of the society to the fine assistance rendered him at various times in the matter of preparing papers. This assistance was given by Mrs. Barnes, librarian, at the medical school.

Dr. McBride read a paper on "Tuberculous Lymphatic Infection." Abstract follows:

The lymphatic system is made up of a network of delicate vessels which traverse a series of glands bringing lymph into the venous system. Lymph capillaries of origin have closed extremities and do not penetrate beyond epithelial linings.

When an initial tubercle deposit takes place the nearest gland is the first gland enlarged and the chain of glands through which the lymph flows from the original infection exhibits a diminishing involvement. There occasionally ensues a degree of fibrous tissue proliferation to produce a protective metamorphosis. Sometimes the defensive function is so overwhelmed as to cause a degenerative process and tubercle bacilli are passed from one gland to another until they finally reach the venous system. Then the blood stream carries them to the alveoli of the lungs.

The alveoli are not supplied with lymphatics.

All the lymph from all the lymphatic glands of the body flow through the deep cervical group and the peribronchial and perivascular groups. These groups empty into the main trunk of the venous system thence to the alveoli of the lungs.

When a lymphatic gland becomes infected inflammation takes place and further flow of lymph is obstructed, it becomes distended and the flow of lymph is sent backward. This may occur in the peribronchial and perivascular group and infection reach the alveoli in this manner.

In most cases pulmonary involvement is secondary to tuberculosis of the bronchial glands. Behring Calmette and Guérin have shown the passage of tubercle bacilli through intact intestinal and bronchial mucosa to the mesenteric and bronchial glands and their early appearance in the thoracic duct and pulmonary artery.

The crypts of the tonsils and the sulci of adenoid tissue form a fine infection atrium and enhance the progress of the bacilli to neighboring glands. Various authorities have proved that various methods of examination show 60 to 90 per cent. of children between the ages of 1 to 10 years with tuberculous lymph glands, that the size of the dose determines the grade of disease, that the lungs are last infected.

Dr. McIntyre read on "Treatment of the Tuberculous Patient." Abstract follows:

There is a tendency to treat the disease, tuberculosis, unfairly. It is a curable disease. The lives of advanced cases may be prolonged and made comfortable.

The treatment resolves itself into the relationship between the individual patient and the individual physician. It is necessary that the patient understand that the disease begins in childhood. That it advances and recedes, develops slowly and heals slowly. Too often the relationship begins as one of deception—the patient and friends furnishing the misleading information, and the physician misinforming the patient.

Of the many measures used in building up natural resistance, open air, food, rest, and exercise are most generally used. Unfortunately these are used without any comprehension of their action. Many tuberculous patients have followed this plan and have eaten and exercised themselves into the grave.

The patient should be seen frequently and physiological explanations given of various respiratory, circulatory, digestive and nervous symptoms. The proper instruction of the patient often relieves his depression. An intelligent explanation is far superior to drugs in the relief of many symptoms.

Of all the remedial measures, rest is the most important. All the cases with fever, weakness, and tachycardia should be kept at rest until these symptoms have disappeared. The temperature and pulse and not the extent of the lesion are the indications for rest.

Fresh air can be obtained by all except those who live in the slums. But few patients can leave the city for an indefinite period. The suburbs are suitable for families with tuberculous members. Treatment at home is less expensive and does not entail separation of families. Only the well-to-do should be advised to change climate. It is no less than a crime to send patients alone and nearly penniless to distant points. There is no climate where tuberculosis does not occur or where the patient surely will recover. In climatic resorts the patient must observe discipline, and it is the discipline which produces results.

Occasional gains are made by forced feeding. However, a gain in weight does not mean a lung lesion has improved. Frequently the gastro-intestinal tract rebels. Many patients are benefited by fasting. If rest is of first importance it is good therapeutics to rest the digestive organs.

There are no specific agents which exert a selective action on the tubercle bacilli. Drugs have an effect on some of the symptoms. Though they do not cure the disease, the patient has but little confidence in the man who has no remedy for his ailment. One condition must be observed. The drugs must be harmless. There are no standard tuberculins. As a general proposition they should be used only by those devoting a larger part of their time to tuberculosis patients and thus gaining an appreciation of the various tuberculin reactions.

Fever, coughs, and night sweats are best controlled by suggestion, rest, fresh air, and counter-irritation.

Hemoptysis is a blessing in disguise, if of moderate amount, making a lasting impression and converting the patient to your manner of thought. It calls for the sitting position, morphin, strapping the affected side, and application of ice. Some of the various fibrin producing serums may be tried. If these fail pneumothorax should be tried as there is nothing to lose.

Accept nature's aid whenever offered. Do not aspirate pleural effusions unless they cause urgent symptoms, such as dyspnea, cyanosis, or cardiac weakness. The fluid usually serves a useful purpose by compressing the lung and putting it at rest.

In discussion Dr. Sowders said tuberculosis is not diagnosed as often as it should be. Experience has shown that the infection takes place early in life. Tubercular bacilli have been found in the placenta and in the blood of new born infants, although it is probable that one does not inherit tuberculosis but rather the diathesis. Guinea pigs have been fed on tubercular food and have had lung involvement without intestinal tuberculosis.

Rest is the most important part of the treatment. Much must be taught the physician in tubercular diagnosis. Many cases he saw in France were due to too much work and exposure breaking down their resistance. In marked tuberculosis Webb has his patients lie on the affected side for an indefinite period. This limits motion and aids healing. Forced feeding is taboo. It does not matter what or how much food a patient has, but how he can handle it is the important thing. No one has yet proven that altitude has any influence in treatment. He does not believe our winters conducive to most rapid healing.

Dr. MacDonald said both papers were very timely, as we all at times get careless and off guard. Tuberculosis in children is a defense against adult tuberculosis. The prolonged night cough of children is probably mediastinal tuberculosis. Use of tuberculin should be limited to institutions. One should always have in mind the pathological picture of the patient. Object in treatment is to have nature wall off the disease by fibrous tissue and this is a slow process. The patient should be kept informed of his condition from time to time. A patient recovering from tuberculosis gets enthusiastic and deceives his physician and does more than he should. Rest of the patient should be supervised. Does not send his patients away unless he knows where they go and how they are to be treated. Forced feeding is dangerous and may do great injury.

Amos: In the treatment of tuberculosis there is something definite demanded by the patient and unless you hold the patient to specific instructions he will leave you for some one else. He puts patients to bed if they run a temperature as long as temperature is present. He then lets them up for a short time to see if temperature returns, if it does they go back to bed. Major number of advanced cases under proper care will get well.

Dr. Earp spoke of case that had coughed up a pneumolith; following this a cavity was healed over. He believes this pneumolith curetted the cavity and produced healing.

Meeting adjourned. Attendance 65.

DR. A. L. MARSHALL, Secretary-Treasurer.

THE COUNCIL

The regular mid-winter meeting of the Council of the Indiana State Medical Association was held at the office of the executive secretary, Hume-Mansur Bldg., Indianapolis, Jan. 14, 1920, at 3 p. m. Present: Drs. J. Y. Welborn of the First District, J. B. Maple of the Second District, Walter Leach of the Third District, A. G. Osterman of the Fourth District, F. J. Spilman of the Sixth District, G. W. H. Kemper of the Eighth District, W. R. Moffitt of the Ninth District, E. M. Shanklin of the Tenth District, G. G. Eckhart of the Eleventh District, President C. H. McCully, Editor A. E. Bulson, Jr., Secretary Charles N. Combs, Mr. F. E. Schortemeier, executive secretary, and Mr. F. E. Raschig, acting executive secretary. Dr. F. B. Wynn and Dr. W. N. Wishard, Indianapolis, were also present during part of the meeting.

The minutes of the previous meeting were read and approved. The chairman, Dr. G. W. H. Kemper, called for the councilors' reports, which were in the main very gratifying.

First District: Every county holding regular meetings.

Second District: No district society meetings since 1917. Regular meetings in all except Owen and Martin Counties, but regular meetings to be held in 1920.

Third District: Good district meeting the last time. No regular meetings in Clark, Scott and Harrison Counties.

Fourth District: Good district meeting.

Fifth District: Dr. Rice not present, and report was made by Dr. Combs. No district meeting for several years. No regular meetings in Parke and Vermillion Counties last year, but promise of good meetings this year.

Sixth District: Good district meeting. Councilor has not yet visited county societies since his recent election.

Seventh District: Councilor has not been elected to succeed the late Thomas B. Eastman.

Eight District: Good district meeting and regular meetings in every county.

Ninth District: Every county holding regular meetings.

Tenth District: Three good district meetings a year. Regular meetings in all except White County. Jasper-Newton County Society was held up as a model for the other counties in the state, having a 100 per cent. membership of eligible physicians and a 95 per cent. attendance being nothing unusual. Secretary Combs corroborated this report by relating his experience in a recent visit to that society, which was held on a bad winter night, and yet physicians drove thirty miles to be in attendance, most of the towns being represented by every doctor living there. An especially good paper was recently read at the Porter County Society, and the councilor has arranged to have this paper read at neighboring county society meetings, a plan which is heartily endorsed for other districts. A discussion ensued concerning the advisability of rearranging some districts for reasons of convenience, as the railroad facilities made it easier for some counties to be looked after by different councilors. A motion was carried that the Council recommend to the House of Delegates at its next meeting that Laporte County be transferred to the Thirteenth Councilor District, Benton County to the Ninth District and White County to the Tenth District.

Eleventh District: Two good district meetings a year. All counties are holding regular meetings except White, with irregular meetings in Carroll, Wabash County having a particularly live society.

Twelfth District: Dr. Morgan was absent, and Dr. Bulson made a report. Good district meetings. Regular meetings in all counties except Lagrange with irregular meetings.

Thirteenth District: Dr. Miller, being out of the state, was not present to make his report.

The editor of the JOURNAL, Dr. A. E. Bulson, Jr., petitioned the Council for an increase in the apportionment from 75 cents to \$1.00, explaining that this was the first increase that has been asked since THE JOURNAL was instituted, and there could be no argument that the cost of paper, labor, etc., had increased more than 33½ per cent. in the last ten years. Dr. Shanklin moved that THE JOURNAL be allowed \$1.00 for each member to take effect Jan. 1, 1920. Motion carried.

Dr. Bulson urged the assistance of the Council in helping to get the war records from each county. Dr. Wynn, acting chairman of the Indiana Historical Commission, spoke to the same effect and made an appeal to the medical profession to submit a good report for the volume on Indiana's War Record soon to be published.

Mr. Raschig submitted a report for the executive office in which he called attention to the fairly good showing in the membership at the present time despite the fact that the war has interfered with medical society activities. At the close of 1919 there were 2,459 members in good standing. He also called attention to the fact that the Association begins the new year in good financial condition, with a balance of \$2,018.78. The exhibitors at the annual session paid \$600 for space.

The Association has been cooperating with the State Board of Medical Registration and Examination in attempting to rid the state of quacks who are practicing medicine without license; and the executive

office has been attempting to assist physicians who have cases with the State Industrial Board, though there have been few of these cases in the past year.

The officers also have been laying the foundation for public cooperation in protecting our medical laws at the next legislature. Attention was called especially to the necessity of working the year round for the election of men for the legislature who will not be misled by the propaganda of the various cults seeking class legislation. The executive secretary recommended the appointment of a strong legislative committee in each county society and that the importance of looking after threatened unfavorable medical legislation be emphasized by the councilors in their visits to the various county societies.

The Association was asked to approve the reintroduction of virtually the same bill that was introduced at the last session to strengthen our present medical practice act by (1) providing for the annual registration by the State Board of Medical Registration and Examination of all duly licensed practitioners at a fee of \$2. This amendment, if carried, will provide funds to enforce the law, a duty with which the State Board is charged but which for some time has been without money to employ an attorney; (2) increasing the prosecutor's fee in illegal medical practice cases from \$5 to \$25 in case of conviction; (3) raising the fine on conviction from the present range of \$25 to \$100 to range from \$100 to \$500.

The executive secretary asked for an increase of his salary which on January 1 was \$1,200 per year; and he also asked for an increase of salary for the stenographer in the executive office.

The suggestion also was made that the Speakers' Bureau for stimulating interest in county medical society meetings be encouraged.

Report was received and opened for discussion.

After considerable discussion, a motion prevailed that the office of the executive secretary be discontinued, but that Mr. Schortemeier should be retained at an adequate salary as attorney for the Association.

A further motion was carried that the chairman of the Council appoint a meeting of three to arrange the details of Mr. Schortemeier's functions and salary, and to confer with the Committee on Medical Defense with a view of having him act as counsel for the Medical Defense Committee. Chair appointed Drs. Maple, Welborn and Shanklin, who immediately retired to attend to their duties.

The secretary reported that there were still a few members in the army, and asked permission to continue the plan for this year of remitting the dues of such members. On motion, this permission was granted.

Secretary moved that the meeting adjourn in the memory of Drs. O. J. Gronendyke and Thomas B. Eastman, councilors of this Association, whose untimely death occurred since the last meeting of the Council.

Adjournment.

CHARLES N. COMBS, Secretary.

MIAMI COUNTY

The Miami County Medical Society at its January meeting elected the following officers for the ensuing year:

President, R. W. Brookie; vice president, O. U. Carl; secretary-treasurer, M. L. Wagner; censor, E. H. Griswold; representative to State Association, J. E. Yarling.

M. L. WAGNER, Secretary.

SHELBY COUNTY

The Shelby County Medical Society met in regular session January 7, and elected the following officers: President, V. C. Patten, Morristown; vice president, Williard Parish, Shelbyville; secretary-treasurer, F. E. Bass, Shelbyville; board of censors, Dr. Inlow, Blue Ridge; Dr. Wells, Fairland, and Dr. Keeling, Waldron.

Regular meetings will be held in the council chamber of the city hall, Shelbyville, the first Wednesday of each month at 7:30 p. m.

F. E. BASS, Secretary.

SULLIVAN COUNTY

The twenty-fifth annual banquet of the Sullivan County Medical Society was held at the Christian Church in Sullivan on January 13, under the direction of Dr. F. M. Dukes, president; C. R. Walters, vice president, and H. C. O'Dell, secretary-treasurer. The following unique invitation, program and menu was instrumental in arousing the interest and attendance of the Sullivan County physicians:

Dear Doctor: Yourself, friend wife or friend feminine are most cordially invited to come play with us on this occasion. The war is over; come, let's have a good time once more as in the days long since. Friends, food, frolic and fun furnished freely. Come runnin', come funnin'.

SULLIVAN COUNTY MEDICS.

Program: Invocation, Dr. Joseph Freeman; Words of Welcome, Dr. W. N. Thompson; Them Words Returned, Mrs. J. T. Oliphant.

"Uncle Tom's Bungalow," burlesque magnifique, in twenty acts. Characters: Uncle Tom, Fatty Arbuckle; Little Eva, Marguerite Clark; Topsy, Joe Martin; Eliza, Norma Talmage; Little Harry, Sambo; Ophelia, Ben Turpin.

Chorus: Eight singers of such note that their names are guaranteed to have appeared on Victor Records, have been secured at fabulous prices.

Hammer and Drill Quartet: Pull 'Em, Drill 'Em, Grind 'Em, Gas 'Em.

Decocteized bloodhounds only used. Ice used, furnished by our warm friends. Shine Bright stove blacking used on the niggers.

Thank heavens eggs is high!

Menu: Histeria Cocktail; Cauterized Flapper; Gauze Dressing; Carbohydrate Ration; Hibiscus Glucoside; Mixed Bacterin; Bacillus Botulinus; Hot Glutin Twist; Decoction Caffeine et Tannin; Equinus Notecurnus Sensitizer; Solidified Linament; Coffin Pills; Ragweeds.

Eighty-seven guests and members attended the banquet.

WELLS COUNTY

The Wells County Medical Society met Dec. 16, 1919, for their annual reorganization meeting. The following officers were elected: President, B. W. Harris, Uniondale; first vice president, D. C. Wyburn, Ossian; second vice president, J. W. McKinney, Bluffton; secretary-treasurer, George B. Morris, Bluffton; censor, Fred A. Metts, Bluffton; delegate to State Association, George B. Morris, Bluffton; alternate, F. M. Reynolds, Montpelier.

This society reports twenty-six paid members for 1920—every eligible physician in the county being a member.

GEORGE B. MORRIS, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1919, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

ICHTHYOL.—An aqueous solution, the important medicinal constituents of which are ammonium compounds containing sulphur in the form of sulphonates, sulphones and sulphides. These products result from the sulphonation of the tarlike distillate obtained from the bituminous shales found near Seefeld in the Tyrol. Ichthylol is weakly antiseptic and mildly irritant. It is used locally on the supposition that it will secure the absorption of swellings and effusions in contusions, burns, etc., and especially in gynecologic practice and in various skin diseases. Ichthylol has been tried internally in a great variety of conditions, but its therapeutic value in many of its suggested applications has not been fully established. Merck and Co., New York (*Jour. A. M. A.*, Jan. 3, 1920, p. 30).

VERONAL-SODIUM.—A brand of barbital sodium complying with the N. N. R. standards. For a discussion of the actions and uses of barbital sodium, see New and Nonofficial Remedies, 1919, p. 83. The Winthrop Chemical Company, Inc., New York.

PROCAINE-CALCO.—A brand of procaine complying with the N. N. R. standards. For a discussion of the actions and uses of procaine, see New and Nonofficial Remedies, 1919, p. 30. The Calco Chemical Company, Boundbrook, N. J.

TYPHOID-PARATYPHOID BACTERIN (SPECIAL BACTERIAL VACCINE No. 13).—Marketed in 5 Cc. vials, each cubic centimeter containing 1,000 million killed *B. typhosus*, 750 million killed *B. paratyphosus* "A" and 750 million killed *B. paratyphosus* "B." For a discussion of typhoid vaccine, see New and Nonofficial Remedies, 1919, p. 292. E. R. Squibb and Sons, New York (*Jour. A. M. A.*, Jan. 3, 1920, p. 31).

MERCUROCHROME-220.—A preliminary report of the Council on Pharmacy and Chemistry discusses the experimental status of this new germicide for use in the genito-urinary tract. While the lack of confirmatory evidence of its value does not permit more than a tentative acceptance, the available data may be sufficient to warrant its use by physicians, provided its experimental therapeutic status is recognized. Mercurochrome-220 (marketed by Hynson, Westcott and Dunning, Baltimore) is stated to be dibromoxymercury fluorescein. It is a red powder, insoluble in water but soluble in alkalis. According to Young, White and Swartz, Mercurochrome-220 is a strong and rapidly acting germicide which penetrates the tissues readily and is tolerated in 1 per cent. solutions by the bladder, renal pelvis and urethra. Only temporary discomfort is caused when a 2.5 per cent. solution is applied to the anterior urethra. Its toxicity is high, but no systemic effects have been observed following its local application (*Jour. A. M. A.*, Jan. 3, 1920, p. 31).

CHINOSOL.—Oxyquinolin Sulphate.—Chinosol is a powerful, nontoxic antiseptic, somewhat stronger than mercuric chloride and considerably stronger than phenol. It is a feeble germicide, being weaker than phenol and much weaker than mercuric chloride. Chinosol is claimed to have marked analgesic power and to be an efficient deodorant. Chinosol is also marketed in the form of Chinosol tablets 0.25 Gm. Parmele Pharmacal Company, New York.

DUBOIS' IODOLEINE.—Iodized poppyseed oil. An iodine addition product of poppyseed oil. Dubois' Iodoleine may be used whenever iodides are indicated, its effects being more gradually exerted. It is supplied as Dubois' iodoleine capsules 0.25 Cc., equivalent to 0.1 Gm. iodine, Dubois' iodoleine injectable, containing 30 per cent. iodine, and Dubois' iodoleine injectable ampules, equivalent to 0.3 Gm. iodine. David B. Levy, New York (*Jour. A. M. A.*, Jan. 10, 1920, p. 104).

THYROXIN.—4, 5, 6-trihydro-4, 5, 6-triiodo- α -oxy- β -indole propionic acid. An active principle obtained from the thyroid gland. Thyroxin is used essentially for the same purposes as Dried Thyroids, U. S. P. It is indicated in some cases of diminishing or absent thyroid functioning, such as simple goiter, cretinism or myxedema. Thyroxin is supplied *only* in the form of tablets for oral administration, containing, respectively, 0.2, 0.4, 0.8, and 2 Mg. of thyroxin. E. R. Squibb and Sons, New York.

THROMBOPLASTIN HYPODERMIC-SQUIBB.—A sterilized extract of cattle brain in physiological solution of sodium chloride. It complies with the description of thromboplastin-Squibb, but a longer time is required for the clotting of blood plasma. It is intended for hypodermic and intramuscular injection to increase the coagulability of the blood. E. R. Squibb and Sons, New York (*Jour. A. M. A.*, Jan. 10, 1920, p. 105).

PROPAGANDA FOR REFORM

NAMES FOR PHENOLPHTHALEIN.—The following is a partial list of names under which phenolphthalein and phenolphthalein preparations and combinations are or were advertised: Alophen, Cholelith Pills, Elzernac, Ex Lax, Exurgine, Laxophen, Laxine, Laxirconfect, Laxothalen Tablets, Paraphthalein, Phenalein, Phenolax Wafers, Phenolphthalein Laxative, Probilin, Prunoids, Purgatol, Purgen Konfect, Purgella, Purglets, Pürgo, Purgolade, Purgotin, Purgylum, Phuphen, Thalosen, Veracolate, Zam Zam. What a Babeldom would arise in medical practice if this business policy of manufacturers to present their products by coined names were encouraged by the patronage of physicians. Self-respecting manufacturers owe it to the progress of medical science to do away with such camouflage for revenue only and the medical profession owes recognition to these manufacturers by prescribing products by their scientific names (*Jour. A. M. A.*, Jan. 3, 1920, p. 29).

"ANTIPNEUMOCOCCIC OIL" AND CAMPHOR IN PNEUMONIA.—The Council on Pharmacy and Chemistry reports that "Antipneumococcic Oil" (a solution of camphor in oil, sold by Eimer and Amend, New York) is ineligible for New and Nonofficial Remedies because (1) the recommendations for its use in pneumonia are not warranted by the evidence; (2) the name is not descriptive of the composition, but therapeutically suggestive, and (3) the sale of a solution of camphor in oil under a name non-descriptive of its composition is unscientific and a hindrance to therapeutic progress (*Jour. A. M. A.*, Jan. 3, 1920, p. 46).

More Misbrandings.—George L. King, Kingfisher, Okla., was prosecuted by the federal authorities because the therapeutic claims for "King's Kidney Remedy" were false and fraudulent. The United States Drug Manufacturing Company, Philadelphia, was prosecuted by the federal authorities because a number of its tablets were found not to contain the amount of drug claimed. The John H. Casey Medical Company, Hillyard, Wash., was prosecuted by the federal authorities because "Casey's Rheumatic Cure—The Great Montana Remedy" was sold under false claims of composition and of therapeutic properties. Joseph McManus, doing business under the name of Philadelphia Capsule Co., Philadelphia, was prosecuted

by the federal authorities because some of the products sold were misbranded, or adulterated, or both (*Jour. A. M. A.*, Jan. 10, 1920, p. 121).

SINGLETON'S EYE OINTMENT.—This is a British nostrum. The chemists of the British Medical Association in 1909 reported it to be principally a mixture of lard and Japan wax and purified coconut oil, with 4 per cent. of beeswax and 7.4 per cent. of red mercuric oxid (*Jour. A. M. A.*, Jan. 17, 1920, p. 193).

KLINE'S NERVE RESTORATIVE.—In 1915, the A. M. A. Chemical Laboratory reported, of this alleged epilepsy remedy, that essentially each 100 Cc. of the solution contained approximately 8.7 gm. ammonium bromid, 9.2 gm. potassium bromid and 8.0 gm. sodium bromid. Calculated from the bromid determination, each meal-time dose contained the equivalent of 17.2 grains of potassium bromid (*Jour. A. M. A.*, Jan. 17, 1920, p. 193).

APOTHESINE.—This is an efficient local anesthetic manufactured by Parke, Davis and Co. It belongs to the procain rather than to the cocain type, that is, while efficient for injection anesthesia, it is relatively inefficient when applied to mucous membranes. The Council on Pharmacy and Chemistry reports that exception was taken to certain claims of efficiency, safety, etc., and that it sent these objections to Parke, Davis and Co. The firm apparently was unwilling or unable to submit evidence for the claims that had been questioned: nor did it offer to modify the claims themselves. Apophesine is, therefore, ineligible for inclusion in New and Nonofficial Remedies. It will, however, be listed in the "Described but Not Accepted" Department of New and Nonofficial Remedies (*Jour. A. M. A.*, Jan. 24, 1920, p. 265).

DIAL "CIBA."—This is a hypnotic sold by A. Klipstein and Co., Inc. Chemically, it is closely related to barbitol (veronal). The Council on Pharmacy and Chemistry reports that it has not been accepted for New and Nonofficial Remedies because unwarranted claims are made for the product. As it might be made eligible for N. N. R. if the misleading therapeutic claims were eliminated, the Council directed that Dial "Ciba" be included with articles "Described but Not Accepted" so that physicians might be informed with regard to its character and properties (*Jour. A. M. A.*, Jan. 24, 1920, p. 266).

VLEMINCKX' SOLUTION.—This solution, used by Dr. W. A. Pusey for verrucae, is a solution of oxysulphuret of calcium. It is in the National Formulary as *Liquor Calcis Sulphuratae* and is made by boiling together water, lime and sulphur (*Jour. A. M. A.*, Jan. 24, 1920, p. 268).

SKEEN'S STRICTURE CURE.—For some years, a concern in Cincinnati which has gone under the name "D. A. Skeen" and "The D. A. Skeen Co." has advertised a mail order treatment that was "guaranteed" to cure stricture or enlarged prostate. Now the postal authorities have denied the use of the U. S. mails to this concern and its manager, George B. Poole. The product was found to be essentially a solution of ferric chlorid in alcohol and water (*Jour. A. M. A.*, Jan. 31, 1920, p. 340).

PNEUMO-STREP-SERUM.—In an Advertisement of Pneumo-Strep-Serum, the Mulford Company, by going beyond our present knowledge, carries misleading inferences. If the "Pneumo-Strep-Serum" had the virtues with which the advertisement inferentially endows it, this product would have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies. It has not been so accepted, although many other biologic products of the same manufacturer have been (*Jour. A. M. A.*, Jan. 31, 1920, p. 342).

PURITY

POTENCY

TRUSTWORTHINESS

CHARACTERIZE ALL OF

SQUIBB'S BIOLOGICALS

AS WELL AS ALL SQUIBB PHARMACEUTICALS AND CHEMICALS
PARTICULARLY WORTHY OF NOTE FOR USE AT THIS TIME OF THE YEAR ARE

TYPHOID VACCINE

TETANUS ANTITOXIN

Which always should be used early, therefore kept on hand ready for immediate use.

ANTI-MENINGITIC SERUM (Polyvalent)

Equally balanced against all types of Meningococci.

DIPHThERIA ANTITOXIN (Globulin)

Which is small in bulk for the number of units, as is also the Squibb Tetanus Antitoxin.

THROMBOPLASTIN (Containing all cerebral haemostatic substances, including Kephalin in full amount)

For local use and use hypodermically. Causes physiological clotting without danger of Thrombosis or of Embolism.

LEUCOCYTE EXTRACT (Is a Sterile Extract of Healthy Leucocytes)

For use alone or with vaccines and serums. It increases Leucocytosis and Phagocytosis.

Full Directions with Each Package



Complete Literature on Request

E. R. SQUIBB & SONS, NEW YORK
 MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

80 BEEKMAN STREET

A House of Service

1—Studying the Needs of Physicians

THE function of Parke, Davis & Company is to provide a service that will assist the medical profession in the treatment of disease. This service begins with a study of the medicinal needs of physicians. It embraces the investigation, manufacture and testing of therapeutic agents to meet those needs. It includes the efficient and economic distribution of medicinal products throughout the world.

Parke, Davis & Company were only twelve years old as a house when they realized the necessity of greater uniformity in therapeutic agents and gave to physicians something they had never had before—chemically standardized drug products. The importance of this service was promptly recognized. In a comparatively short time assayed medicinal agents were everywhere in demand by the medical profession.

A few years later the need of a more efficient means of treating diphtheria became a prominent subject of discussion in medical circles. In November, 1894, the International Congress of Hygiene met in Budapest. Diphtheria antitoxin was announced to the world. Parke,

Davis & Company immediately began the manufacture of this product. Biologic therapy was thus introduced to the Western Hemisphere.

The establishment of a biologic laboratory paved the way for further opportunities to meet the needs of physicians. Physiologic standardization of drug products became an established procedure. This notable contribution solved the problem of adjusting to definite standards of strength such potent drugs as ergot, digitalis, strophanthus and cannabis indica—drugs not amenable to chemical assay.

Later, medical men began to turn their attention to the use of endocrine products. Physiologic standardization made it possible to supply physicians with uniformly active glandular preparations.

There is an insistent demand today for improved methods in hypodermic medication. Parke, Davis & Company's answer to this demand is a growing list of sterilized ampoule solutions.

The business of this organization is to study the medicinal needs of the physician, and to meet those needs with efficient therapeutic agents.

PARKE, DAVIS & COMPANY

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 3

FORT WAYNE, IND., MARCH 15, 1920

PER YER, \$2.00
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES

Child Hygiene and the Doctor. Ada E. Schweitzer, M.D. Indianapolis	73
The Relation of Ophthalmology to Child Hygiene. John Ray Newcomb, M.D., Indianapolis.....	77
The Relation of Otolaryngology to Child Hygiene. Daniel W. Layman, M.D., Indianapolis.....	79
Meningitis — Neurologic Manifestations. C. D. Humes, M.D., Indianapolis	85

EDITORIALS

Compulsory Health Insurance.....	90
The Doctor's Relation to the Church.....	91
Editorial Notes	92

MISCELLANEOUS

Deaths	97
News Notes and Personals.....	98
Correspondence	103
The Truth about Medicines.....	104
Book Reviews	106

NEXT ANNUAL SESSION, SOUTH BEND, SEPT. 22, 23, 24, 1920.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103, ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

*"A translation of this work into English
should be welcomed by a large number of
teachers and students of dermatology."—
Journal of the A. M. A.*

Just Ready

Just Ready

DARIER'S DERMATOLOGY

The editor, Dr. Pollitzer, states that this is ". . . a work that is in many respects *unique in its presentation of the subject and . . . of extraordinary value for the student and teacher.*"

For this edition, Professor Darier subjected his book to searching revision, incorporating also the notes made by Professor Jadossohn of Bern in translating the first edition into German. This, the American edition, has the added advantage that, in turn, Dr. Pollitzer has added notes on conditions peculiar to American and English practice, and from his own rich experience in clinical dermatology.

From the wealth of new material we would single out particularly those sections dealing with Anaphylaxis, Phagedena, the Sarcoids, the Gangrenes, the Cutaneous Atrophies, Inguinal Epidermophytosis and the Dermatomycoses. The review of the general interpretation of Tuberculosis, Congenital Syphilis and the Xanthomata has been notably modified; much new matter has been injected on the Dyskeratoses, Cutaneous Diphtheria, the Leishmanioses, the

Cutaneous Leukemias, the Tophi of Gout and on the Sero-diagnosis of Syphilis and treatment with the Arsenobenzols. The third part of the book, Therapeutic Notes, has been rewritten in an endeavor to make them still more practical and to emphasize recommendations dictated by personal experience as to the choice of medication and the errors to be avoided.

The first twenty-two chapters are given over to Morphology—the eruptive lesions and non-eruptive cutaneous changes, the elementary dermatological forms and a description of the principal syndromes derived from them. The Nosology of the Dermatoses is taken up, reviewing the diseases of the skin itself, the pathological entities with a definite etiology, classified according to the nature of their cause. The third part, Therapeutic Notes, contains the essential data required for dermatological treatment and prescriptions which are indispensable.

By J. Darier, Physician to the Hospital Saint-Louis, Member of the Academy of Medicine, Paris, France; Honorary Member of the American Dermatological Association, etc. Authorized translation from the second French edition. Edited with notes by S. Pollitzer, M.D., New York; Ex-President of the American Dermatological Association; Corresponding Member of the French Society of Dermatology and Syphilography, etc. Octavo, 770 pages, illustrated with 204 engravings and 4 colored plates. Cloth, \$8.50 net.

PHILADELPHIA
706-10 Sansom St.

LEA & FEBIGER

NEW YORK
2 West 45th Street

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, South Bend, September 22, 23 and 24, 1920

OFFICERS AND COMMITTEES FOR 1920

President CHARLES H. McCULLY, Logansport
 1st Vice President BUDD VAN SWERINGEN, Fort Wayne
 2d Vice President SAMUEL HOLLIS, Hartford City, Ind. | 3d Vice President CHARLES STOLTZ, South Bend
 Secretary-Treasurer CHAS. N. COMBS, Terre Haute

SECTION OFFICERS

Surgical Section—Chairman, James Y. Welborn, Evansville; Vice Chairman, M. R. Combs, Terre Haute; Secretary, H. O. Shafer, Rochester.

Medical Section—Chairman, Charles P. Emerson, Indianapolis; Vice Chairman, B. S. Hunt, Winchester; Secretary, Jane Ketcham, Indianapolis.

Eye, Ear, Nose and Throat Section—Chairman, John R. Newcomb, Indianapolis; Secretary, E. M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1920), Joseph Rilus Eastman, Indianapolis. Alternate, Miles F. Porter, Fort Wayne. For two years (term expires December 31, 1921), Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington.

COUNCILORS

Chairman, G. W. H. Kemper, Muncie.

DISTRICT	TERM EXPIRES	DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920	7th—T. B. Eastman, Indianapolis.....	December 31, 1920
2d—J. B. Maple, Sullivan	December 31, 1921	8th—G. W. H. Kemper, Muncie.....	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922	9th—William R. Moffitt, Lafayette.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920	10th—E. M. Sbanklin, Hammond.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921	11th—G. G. Eckhart, Marion.....	December 31, 1921
6th—T. S. Spilman, Connersville.....	December 31, 1922	12th—E. E. Morgan, Fort Wayne.....	December 31, 1922
		13th—H. M. Miller, South Bend.....	December 31, 1920

(See list of committees on page iv)

FREE

Sterile
Specimen
Containers
Slides
Culture
Media and
Complete
Fee Table
on request

Write or
Wire

Clinical Laboratory Analyses

The kind of clinical laboratory work that commands respect

Wassermann and other complement fixation tests ...\$5.00

Autogenous Vaccines. In single vials or ampules ..\$5.00

Lange Colloidal Gold test of Spinal fluid\$5.00

Tissue Diagnoses. Frozen section, paraffin or celloidin \$5.00

ABDERHALDEN PREGNANCY and other
Abderhalden reactions.....\$5.00

MILK, FOOD, SANITARY AND TOXOLOGICAL INVESTIGATIONS

Accurate Analyses of All Secretions, Excretions and Body Fluids

ESTABLISHED BY
DR. M. HERZOG
DR. H. C. SWEANY
DR. MEYER D.
MOLEDEZKY
DIRECTOR

Laboratory of
PATHOLOGY AND BACTERIOLOGY
THE MOST MODERN EQUIPPED LABORATORIES IN THE U.S.

1130 MARSHALL FIELD ANNEX 25 E. WASHINGTON ST.

PHONE
RANDOLPH
6552-6553
CHICAGO
ILL.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., MARCH 15, 1920

NUMBER 3

ORIGINAL ARTICLES

CHILD HYGIENE AND THE DOCTOR *

ADA E. SCHWEITZER, M.D.

Director, Division of Infant and Child Hygiene, Indiana State
Board of Health
INDIANAPOLIS

The Division of Infant and Child Hygiene authorized by the 1919 legislature as a division of the State Board of Health, is facing tremendous responsibility. Having as an objective the efficient development of every Indiana child, it must of necessity consider all influences affecting his proper health balance.

To furnish healthy grandparents for the generations that are to follow ours, involves much more than the mere avoidance of disease or death. We must know as nearly as possible what ancestral traits and health standards have contributed to the child's present constitution. We must know something of the age, race, nationality and temperament of each parent; something of the early home and community environment; something of their habits and their knowledge of his needs. Then in addition to all this we must know much of all the influences that directly affect his health, as nutrition, exercise, sleep and care.

Having learned these things, we must know what is likely to be detrimental and seek to eliminate it; we must be able to provide intelligently the most favorable conditions for healthy growth and the proper direction of energies.

I have said these things because I often meet persons who regard child hygiene as a magical entity apart from the individual child, a sort of positive state of being, which may be attained by an organization and thereafter affixed to the state as a most desirable adjunct. The study of

groups of children may help to determine the principles of their care and training, but it is the health of the individual that determines the health of the state.

By working in accordance with the best knowledge we have we may acquire greater knowledge. Little by little we are learning that deformity, disease and death are not "visitations of Providence" but are the results of the violations of nature's own laws, which in themselves are inexorable. Nature is a tower of strength, or an instrument of destruction, as her laws are kept or broken. It is obvious then that the first duty of every one who would promote the cause of child health is to learn as nearly as possible the nature of these laws and the mode of their operation, and to assist in their utilization, in securing for each child his maximum of health.

Our first aid in this important work must come from the persons who have this knowledge and training, the doctors and the nurses. Even if we had in every community a full time health officer and a full time nurse, the work needed at present is of such magnitude that it would demand in addition to these the aid of every other competent doctor and nurse available for this service. It is very desirable that every regular medical society may furnish through its secretary a list of its members who will volunteer to devote even a small amount of time for a stated period to the child hygiene work. The plan should result in the legitimate recognition of valuable professional service. If in any group all are general practitioners, each may make a special study of some phase of the subject and be able to speak with authority concerning it.

The subjects with which we are especially concerned are grouped under the heads—eugenics, prenatal, natal and postnatal care, health supervision of the infant, the preschool child and the school-age child, including the adolescent. In the early summer these subjects were discussed in a series of international conferences. The

* One of the papers in the Symposium on Child Hygiene, presented at the Indianapolis Session of the Indiana State Medical Association, September, 1919.

need for this work in all countries was plainly shown, and while methods varied in different countries, yet certain minimum standards were agreed on as a guide to workers. A copy of these standards will be mailed to each county secretary with the request that they be made the subject of discussion at an early meeting of the local society, and that a report of criticisms and suggestions be mailed to the Director of the Child Hygiene Division to furnish a modification of these standards adapted to Indiana's needs.

That valuable work has already been done in Indiana is shown by a fairly regular lowering of our infant mortality rate for the last ten years, the lowest point, 80, being reached in 1915. The highest mortality was 144 in 1900. For 1916, 1917, 1918 the rates are 85.5, 83 and 88 respectively, the increase in 1918 being largely due either directly or indirectly to the influenza epidemic together with the increased cost of living.

Our decrease in the number of births has been rather startling. Comparing 1918 and 1919 by months from January to August, inclusive, we find that 1919 has an average per month of 1,073 fewer births than are recorded for the corresponding months for 1918, making a total shortage in 1919 of 8,584 births. This deficit becomes more alarming when we note that for deaths of infants under one year for the corresponding months, 1919 lost an average of 149 lives more per month than were lost during the corresponding months of 1918, making the 1919 deficit due to infant mortality 1,192, and the total deficit in baby lives for 1919, 9,776. The infant mortality rates range from 26.4 for June, 1918, to 131.8 for March, 1919. Normally the birth rate should be twice the death rate to preserve the balance of the population, but in October, November and December of 1918 the average birth rate was 19.9, while the death rate was 23.0, or $3\frac{1}{10}$ points above the birth rate as based on the total population. The fatalities to children under 6 due to influenza and complications is reported as 900 for 1918 and 2,500 in 1918-1919.

A little encouragement may be derived from the report for 1916-1917 on marriages. From the pre-war average of 28,970 to 29,025 there is a decided increase to 33,521 in 1916 and 36,811 in 1917, while in 1918 the number dropped back again to a pre-war basis. If France, England and Belgium can hope to preserve their national integrity after almost inconceivable losses we should easily learn from them how to safeguard our interests.

A report of 2,817 deaths from the puerperal

state during 1918, of which 525 were the deaths of mothers, shows us where to begin. Many of these deaths might have been prevented by proper prenatal supervision. The recognition of the importance of obstetrics as a branch of medical science second to none would in the past have saved thousands of lives. Supervision of both mother and infant during the postnatal period would have saved much maternal suffering and many infant lives. Many doctors are now insisting that women who expect to ask their services at the time of confinement, consult them as soon as pregnancy begins and allow them to supervise the entire period which should include postnatal care. A closer linking of obstetric and pediatric care would do much to prevent the high percentage of deaths that occurs during the first week or the first month following birth. Maternal nursing is so important a factor in the child's health that only the most positive contraindication should be allowed to interfere with it. Every preparation for its successful accomplishment should be made during the period of supervision. Ignorance and selfishness should not be allowed to jeopardize the best interest of the baby. Many cases that do not seem to thrive at first may often be adjusted by lengthening the feeding interval, by a knowledge of the quantity and quality of the mother's milk and by supplementary feeding for a brief period or by some correction of the mother's habits or diet. The mother should be warned never to change the baby's feeding without consulting the doctor and never to start a milk modification without his supervision. If she is asked to report at an appointed time every week as to the child's gain, sleep, elimination, etc., such supervision will be comparatively easy. And when our medical colleges give as much thought and care to the subject of infant nutrition as they have hitherto given to the less important specialties of surgery and dermatology, the men they graduate will be better prepared to pilot their difficult feeding cases safely into the harbor of health.

A better perspective on this subject will reveal the baby not a mere baby, wanted or unwanted as the case may be, not a bit of human driftwood tossed out on the restless sea of human life to be submerged or to float in with the tide, but a future citizen of a great republic—a judge, perhaps, or a general, for whom we are responsible. The launching of a human life demands at least as much scientific consideration as the launching of a ship.

The baby's first tooth is a matter of family interest, which is likely to be centered on the

tooth itself rather than on the factors which insure soundness. This interest usually dwindles with the eruption of each successive tooth, until by the time the last temporary teeth have erupted many of the earlier ones have decayed. Parents are likely to feel that when the traditional "second summer" is passed they may cease their vigilance, and so without hindrance teeth decay, adenoids grow, tonsils enlarge and become diseased, glands become infected and valvular heart defects appear.

During this period the child drinks little milk, eats many things that approved diet lists never mention, and is "puny" and irritable, so that when he reaches school age he is suffering from many defects which might have been avoided by proper pre-school supervision.

Percentages of these defects found by examinations of children in many places and applied to Indiana indicate the almost unbelievable results of such neglect. We find that 584,090 or 75 per cent. of our 778,786 school children have defective teeth. How many sins of parents, how many errors of diet, how much thoughtlessness, ignorance and lack of hygienic care do these thousands of defects represent? How many valvular heart lesions, how many cases of rheumatism, how many disturbed nights and loss of time by both parent and child? Osler said ten years ago that more physical deficiency in Great Britain was due to defective teeth than to alcohol. In America we have tried to eliminate the menace of alcohol, but we still tolerate the menace of defective teeth. Every one should know that "teeth which are clean and sound until the individual is twenty-five years old are likely to remain clean and sound to a ripe old age. While teeth neglected until maturity are often past salvage" (Terman).

About 20 per cent., or 155,757, have orthopedic defects which include weak arches and spinal deformities. Malnutrition claims 20 per cent., and adenoids, diseased tonsils and gland defects 25 per cent., or 194,696. The same number have defective vision which is likely to prove a serious handicap to school progress. Many cases of so-called mental retardation are found among the 5 per cent., or 3,894, whose hearing is defective. Another 5 per cent. who have tuberculosis need supervision before they become incurable and are a menace to other children. One and one-fourth per cent. are victims of organic heart disease. This 9,735 should have all activities carefully supervised. Another 1 per cent. are mentally defective or feeble-minded and should not be in schools with

normal children but in special schools adapted to their needs. As they have no legal responsibility reproduction by those having hereditary defects should be made impossible. Only thus can the great burden of the feeble-minded be gradually lifted from our shoulders.

Twenty per cent., or 155,757, are suffering from malnutrition. Children who are from 7 to 10 per cent. below weight for their height are usually undernourished and the cause should at once be sought for. This condition is not confined to the children of the poor and is not always due to either the quality or the quantity of the food.

The total number of defects estimated this year in Indiana schools totals 1,302,520. And there are still those persons who say that school doctors and school nurses are an infringement on the right of parents to look after the health of their own children. If men owe their allegiance to the State, the State certainly owes protection to its children. To salvage this defectiveness will require the expenditure of time and money, will require all the available skill of doctors and nurses. Will it pay? If a man can fight better for having defects removed why should the child drafted into our public schools by our compulsory education laws be compelled to struggle on burdened by defects? So far the major part of medical school inspection work has been confined to the prevention of epidemics. This work is needed and will prevent defects that occur as sequelae to these diseases. But it is only a beginning.

Adequate health supervision will demand the removal or correction of defects and if begun now in every community in Indiana will in the course of five or six years bring children to our schools free from these defects. It will do more than that. It will greatly reduce the number of motherless children, many of whom would have suffered from a lack of maternal care. By preventing invalidism it will increase efficient motherhood, and because of the consequent financial saving will make possible better advantages for the child. The child at birth will be stronger and more resistant to the ills which raise our infant mortality rate. The formation of correct habits during his most impressionable period will insure health and vigorous growth. As he grows older the maintenance of a correct health balance will demand a well ordered life that will be possible only to a child whose mind, morals and aspirations are in the same plane. Each will act as a reflex influence in perfecting the other. If while this preventive work is in

progress we examine every child who enters school this year for the first time and see that defectiveness is lowered to an irreducible minimum and kept there, and next year we examine the next year's beginners, and so on for the next eight years we shall have increased the efficiency and happiness of these children to an inestimable degree, and shall have practically eliminated physical defectiveness from our schools.

Sanitary school houses, continued supervision of nutrition, better adaptation of the school curriculum to the growth periods of the child, and credit for correct habits and physical development as well as for mental improvement will help to bring children to manhood and womanhood with confidence in their ability to meet responsibility and with a knowledge of the joy of achievement.

To the physician who has ever sympathized with human suffering while endeavoring to give relief it is necessary only to point the way. Education and training in correct habits are to be the goals for which we strive. The correction of the existing results of neglect will be necessary to give the child of today his chance.

In our present state of society this educational work can be most successfully carried on by having group instruction given by trained experts. For our young people there are studies for each sex in normal physiology and hygiene and in the importance of normal development from the standpoint of personal happiness and efficiency as well as from the standpoint of racial significance; studies of the general laws of reproduction and Mendelian inheritance, and the nature of poisons that affect the health of germinal cells.

Those who contemplate marriage should give careful consideration to personal health and possible hereditary taint in either family and to the possibility of strengthening good traits. The expectant mother can in many cases be reached through the prenatal clinic, which presupposes a competent doctor and nurse and the close relation of this to the nutrition clinic available to children from infancy to school age, where the health and nutrition of every child may be watched.

Recreation which includes physical training forms a part of the program. It has been the custom in the larger places to provide these advantages for somewhat unrelated groups, though the present tendency is toward better correlation. In the smaller communities, however, it would seem that a well planned

community health center might be provided which would meet all these needs except the provision for actual obstetrical care. Here the nurse in attendance could arrange for prenatal clinics, for educational baby health stations where doctors could come to watch nutrition and advise mothers as to their own health and the health of their children. There should be rest rooms, and rooms for books and games. Rooms could be used on certain days for educational club work. Play should include adults as well as the younger members of the community. In many industrial centers all these things are provided by the corporation owning the town. Why should not a municipality provide these advantages for itself? With this recognition of the importance of health, consideration of municipal sanitation and of a pure milk supply will follow.

Whenever a local medical society wishes to have a clinic held by some person specially trained, concerning perhaps difficult feeding cases, or if a specialist is desired in obscure eye or throat cases the society may resolve itself into a class, bring the difficult cases to the meeting with the parents and hold a consultation.

It will be the aim of this department to encourage and assist in work whereby the more recent discoveries in medical science may be demonstrated to the busy practitioner in his home town. Men who received special instruction as a part of army training will more than repay a government that provided these advantages by placing their knowledge at the disposal of those who worked in the Home Service ranks.

To promote educational work a number of plans have been formulated. It is proposed to establish a confidential registration of expectant mothers to whom advisory letters will be sent at intervals. At the registration of a baby's birth letters will be sent in series which will be concerned with his growth and care. As soon as possible pamphlets will be prepared for distribution through various agencies. Lantern slides and films will be used and health conferences will be held. Suggestions and criticisms from doctors, nurses and public welfare workers will be welcomed.

It is the desire of this Division to reach as quickly as possible all children in Indiana whose health can be improved. We have already found that doctors, dentists and nurses are willing to do all within their power to help. The foregoing statistics show that there has been great wastage of human life in our state. Indiana cannot afford to waste any of her citizens.

THE RELATION OF OPHTHALMOLOGY TO CHILD HYGIENE *

JOHN RAY NEWCOMB, M.D.
INDIANAPOLIS

The relation of ophthalmology to child hygiene has gained recognition in the past few years in a most gratifying manner and those who are in a position to recognize its importance are encouraged in the belief that much will be done in the next few years to further this most important phase of child welfare. The subject is one on which a book might well be written. Its ramifications are many and its interrelation with general medicine so intimate that it will be possible, in this paper, to mention only a few of the more important aspects of the subject.

Ophthalmological conditions which have a direct effect on the health and development of children may be roughly divided into the following general groups: (a) congenital defects and hereditary constitutional diseases; (b) prenatal and postnatal traumatism and infections; (c) communicable ocular diseases; (d) ocular disease arising from malnutrition and arrested development; (e) errors of refraction and anomalies of the extra-ocular muscles.

Abnormalities due to heredity, congenital, prenatal and postnatal traumatism and infections and those due to malnutrition and arrested development are very generally recognized and in this country are now receiving prompt and thoroughly adequate attention and treatment of a corrective nature.

The communicable ocular diseases are now being more intelligently handled, but still further improvement could be made by the enactment and enforcement of more rigid regulations by the Board of Health.

As an example of the unfortunate condition existing I shall refer briefly to a situation which came up during the fight against trachoma about three years ago. In several instances, to my personal knowledge, children with trachoma were found and discontinuance of school attendance ordered, but the parents secured certificates from their physicians that the condition was not trachoma and the children were immediately readmitted to school. The disagreement in diagnosis in itself showed that a doubt existed and so long as there was any doubt as to the diagnosis of trachoma those children should not have been readmitted to school. The Board of Health should have authority to issue an order

making it impossible for a child with and disease of the eyes to continue school duties and should make the requirement for readmittance nothing short of complete recovery. This would work no injustice nor hardship in any direction. Any child whose eyes are in any way abnormal is not physically qualified to do school work so long as that condition exists. If the condition is of a trivial nature the loss of time from school will be insignificant. If the condition is not cured within a very short space of time it is self-evident that the condition is not trivial and it is of the greatest importance that that child be excluded from the schools for its own good as well as to safeguard the unaffected children. Had such a ruling been in force when the effort was being made to eliminate trachoma a much greater degree of success would have been obtained. If it were possible to establish a rule that no child whose eyes give any evidence of disease of any nature whatsoever or are abnormal in any respect would be allowed to continue in school until such condition was cured, a wonderful amount of good would be accomplished.

Errors of refraction and anomalies of the extra-ocular muscles play a most important rôle.

With the introduction of medical inspection of school children came a vast and immeasurable benefit to the community at large. Too much praise cannot be given the careful and painstaking work performed by the school inspectors and the ophthalmologists are in a position to appreciate to the fullest the great amount of good done and the incalculable number of ocular tragedies prevented by the medical inspection of schools. Inspection of children's eyes and the most careful measurement of visual acuity cannot, unfortunately, uncover all cases of abnormality. We have, in the first place, a very difficult if not impossible question to answer—What is a normal eye? When we speak of the normal eye in childhood we have no fixed and established standard on which to base an opinion. The eye in childhood is normal only to that extent to which the normal physiologic development has progressed. All children when born have very gross errors of refraction which by a natural developmental process will be relatively overcome and when the physiologic development is in no manner interfered with the eyes very rapidly approach a state of perfection. Should this process meet with interference or be delayed the natural conclusion is that such a condition would result in manifest loss of function. Such, however, is not always the case. Eyes in which the ap-

* One of the papers in the Symposium on Child Hygiene, presented at the Indianapolis Session of the Indiana State Medical Association, September, 1919.

proach toward normal is blocked will in many instances develop a compensatory accommodation which may utterly mask the true condition and which may be productive of no apparent symptoms for a dangerously long period of time. Therefore if a child's eyes possess normal visual acuity we are not justified in stating that they are normal. However, if a child's visual acuity falls below a certain established standard we may be positive of the existence of some abnormal condition. No one is warranted in pronouncing a child's eyes normal except after a very searching examination made when the muscles of accommodation have been rendered inactive by the use of atropin, scopolamine or other recognized cycloplegic. It is an everyday occurrence in the practice of ophthalmology to examine children whose visual acuity is normal or even above the normal and find a gross error of refraction requiring a very strong lens to correct. It is these cases which offer the problem to the man in general practice or the man engaged in the medical inspection of school children. It is a grave problem because of the fact that in spite of the very great error present there are no symptoms to be found which would indicate that anything other than the normal is present. So frequently these cases present absolutely no history of inadequate vision, ocular pain or headaches. The nervous system in a very high percentage of cases presents the initial symptoms of ocular strain. The more frequent nervous manifestations are nervous excitability, irritability, restlessness when asleep, dreams of an unpleasant nature, contortions of the muscles of the face or eyelids, and as a direct result of the state of turbulence of the entire nervous system, faulty deportment in school and at home. When in search of possible evidence of eye strain question very closely the child and those associated with him in regard to these points. Too much emphasis cannot be laid on this point: that a serious error of refraction may be present without any direct ocular symptoms being present. The effect on the mental aptness of the child is frequently very marked, the result of an unconscious avoidance of study and application due to the fact that such study invariably results in certain unpleasant symptoms which the child has learned are always induced by the study or work of the school room.

There are many other indirect symptoms of eye strain but the two which most concern the general medical man are subnormal visual acuity and the effects on the nervous system of eye strain in children. Even casual observation of

a few of these cases will convince any of you of the magnitude of the symptoms which may result from even a slight error of refraction.

The anomalies of the extra-ocular muscles do not produce in children the wide variety of symptoms brought about by errors of refraction nor are the symptoms observed so intense. The best advice to give the parents of the children with squint or crossed eyes is to consult a competent ophthalmologist as soon as possible. The majority of the cases of squint in children can be easily remedied and early intervention is advisable. Do not permit parents to labor under the delusion that the child will outgrow the condition.

The rôle of the ophthalmologist, the family physician, the family and the school is one and the same and that is early and thorough examination of the eyes by a competent ophthalmologist and religious obedience to directions he may give in regard to the hygiene of the eyes and the use of corrective or remedial measures. Do not give audience to nor encourage belief in the advertising propaganda against the use of drugs in examining the eyes. Children's eyes can be examined in no other way, all other claims to the contrary, and in many cases in which the correction of errors of refraction has been attempted by others than ophthalmologists the results are such as to furnish sufficient proof of the fallacy of the unwarranted and much advertised claims which we read in the daily press. Nothing is more important to the physical welfare of a child than normal visual function and to insure that procure the best professional advice obtainable in your community, obtain it early and see to it that the advice given is followed to the letter.

The general improvement observed in children following the correction of errors of refraction is in many instances so marked and it affects so intimately the proper functioning of various organs which have no direct connection with the eye as to be unexplainable and almost unbelievable. The statement that a child's general health may be seriously affected and even endangered may be questioned by some, but a study of case reports will convince you of the intimate relationship of ophthalmology to the general physical welfare of children.

It is unnecessary to go into detail in regard to the physical deterioration observed in children whose ocular difficulties are not properly treated. You all have seen such cases, but possibly some of the points brought out in this brief and informal discussion may bring more forcibly to your attention the importance of the

subject. Ocular hygiene in children deserves the sincere attention of the entire medical profession and the ophthalmologists of the country who are particularly interested in this subject hope for such cooperation from the medical profession and the State that future generations will be less handicapped than those of the past and present. A broader comprehension and a more general appreciation of the rôle which ocular pathologic conditions play in the production of general disturbances in childhood is necessary in the interests of Child Hygiene.

THE RELATION OF OTOLARYNGOLOGY TO CHILD HYGIENE *

DANIEL W. LAYMAN, M.D., F.A.C.S.
INDIANAPOLIS

The indications for the removal of tonsils and adenoids have been pointed out numerous times by writers and speakers before medical and kindred societies. This, of course, is an old story to the physicians. However, those who are interested in child hygiene, other than from a professional standpoint, might be enlightened by seeing the list of diseases or physical defects caused by the presence of tonsils and adenoids.

The presence of adenoids and tonsils adds to the gravity of any disease a child may have.

Certain children who do not thrive properly, show remarkable improvement after the removal of relatively small tonsils.

In a recent paper by the author entitled, "Results Obtained by Tonsillectomy in the Treatment of Systemic Diseases," the relationship of tonsillar infection to diseases, especially systemic, was brought out. Tabulated statistics showed that tonsillectomy in the treatment of many diseases had given exceedingly satisfactory results.

The past decade has shown the laryngologist active in tonsillar surgery, because the internist and pediatrician, backed by the scientific work of the pathologist and bacteriologist, have advocated the removal of tonsils, which had proven to be troublesome. Today, the progressive laryngologist does not wait until tonsils have caused one or more of the diseased conditions, shown on the chart, before advocating the removal of these lymphoid structures. Even in early childhood the day for ultra conservatism in tonsil enucleation is passed. If an adenoid or

infiltrated cryptic tonsil is present in a child otherwise apparently healthy, the progressive laryngologist does not wait until the child has several attacks of acute otitis media, necessitating ear drum incisions, with a possibility of mastoiditis and its complications, before advocating the removal of this lymphoid tissue. The progressive internist, pediatrician, laryngologist and general practitioner do not wait because they believe the "adenoid and tonsil child" is harboring diseased tissue which is amenable to

ADENOIDS AND TONSILS

- | | |
|---|--|
| I. Conditions resulting from the obstruction of nasal respiration by adenoids chiefly, tonsils to a certain degree. | 1. Changes in facial expression
(a) Open mouth
(b) Pinched nose
(c) Thick lips
2. Oxygen starvation—producing
(a) Restless sleep
(b) Anaemia
(c) Retarded physical development, such as, flattened chest walls
(d) Dull mentality
3. Interference with nursing
4. Interference with phonation
5. Irregularities of the teeth
6. Impaired hearing |
| II. Reflex neurosis (due to adenoids). | 1. Epileptiform convulsions
2. Nocturnal incontinence of urine
3. Stammering
4. Hay fever |
| III. Conditions resulting from inflammatory changes of the adenoids. | 1. Acute intranasal inflammation
2. Pharyngitis, retropharyngeal abscess
3. Tonsillitis, quinsy
4. Laryngitis, tracheitis
5. Bronchitis
6. Catarrhal and purulent middle ear diseases and complications
7. Cervical adenitis |

More susceptible to acute exanthemata and infectious diseases.

Tonsils

- | | |
|--|---|
| IV. Conditions resulting from inflammatory changes of the tonsils. | 1. Tonsillitis, abscess, etc.
2. Cervical adenitis, tubercular adenitis
3. Laryngitis, tracheitis
4. Bronchitis, pneumonia
5. Catarrhal and purulent middle ear diseases and complications
6. Increased susceptibility to acute exanthemata and infectious diseases, i. e., diphtheria, scarlet fever, whooping cough, measles, acute articular rheumatism, chorea, endocarditis, cerebrospinal meningitis, infantile paralysis and tuberculosis
7. Gastrointestinal diseases
8. Nephritis |
|--|---|

health. They do not wait because it has not been demonstrated to them that the early removal of tonsils had any effect whatsoever in the development of the child. I quote from a letter I received from Dr. La Fetra, a well known children's specialist of New York City:

"In answer to the inquiry in your letter, I write to say, that I have never been able to notice any abnormality in growth or development in those boys and girls whose tonsils were removed in early childhood. Whatever advantage the tonsils may have physiologically, it would seem that nature has provided sufficient other tissue of the same sort to take up vicari-

* One of the papers in the Symposium on Child Hygiene, presented at the Indianapolis Session of the Indiana State Medical Association, September, 1919.

ously the work of the tonsils when these are removed. As regards their susceptibility to disease, I would say that children whose tonsils have been removed, are much less susceptible to respiratory and gastro-intestinal disturbances of all sorts. Moreover, when they have measles, scarlet fever or whooping cough, the disease is much less severe than it would have been, had their diseased tonsils been present."

This letter is typical of the attitude of many children's specialists concerning the tonsil question.

That the presence of tonsils and adenoids increase susceptibility to contagious diseases and that in such cases complications are more frequent, is seen by noting the following figures compiled by the health commissioner of New York City.

Relative frequency of presence of tonsils in cases of contagious diseases admitted to:

	Per Cent.	With Complications
Willard Parker Hospital, New York	Ninety	All cases
Kingston Ave. Hospital, New York	Ninety-eight	Large majority
Riverside Hospital, New York	Eighty	
Baltimore Hospital	Large majority	

Reports of contagious disease hospitals in other cities show that from 80 to 100 per cent. of the contagious disease cases had tonsils; also that tonsils were nearly always present in the cases which developed complications.

Dr. Henry L. Lynah, New York City, laryngologist to several contagious disease hospitals of New York, wrote me as follows: "In our contagious disease hospitals, the percentage of admission in whom tonsillectomy has been performed, is from 2 to 4 per cent. The 96 to 98 per cent. have tonsils in various degrees of sizes."

The facts and figures show that the removal of adenoids and tonsils as a prophylactic measure would have a tendency to diminish contagious diseases.

That many other diseases would be diminished or eliminated in a child's life by a timely operation is shown in the charts exhibited.

The pediatricians and physicians have observed that children from whom tonsils were removed in early life passed through all the stages of natural development with less sickness. Now that the profession understands that the tonsils play so small a part, if any, in the growth and development of children, I contend that tonsillectomies in early childhood will some day be placed in big type, in the category of preventive medicine.

There is another very important condition of otolaryngology which is related to child welfare. I refer to the severe burns of the throat and esophagus caused by caustic alkalies. I wish the chairman would ask Mr. Miller, of the State Food and Drug Commission, to tell us what procedure is best to follow to compel manufacturers to label caustic alkalies "poison."

DISCUSSION OF CHILD HYGIENE SYMPOSIUM

DR. O. C. BREITENBACH (Columbus): Social work as a science has gradually evolved the fact that a solution of many of its most difficult problems rests with the physician. I can not conceive of a more timely subject for a symposium than the subject matter so ably incorporated by the authors of the respective papers. Faulty hygiene and disease strike at the very root of industrial and social welfare and by sickness and premature death invalidate the right of growth and development of the individual. Unemployment, overwork, inadequate remuneration, ignorance, the employment of women before and after childbirth, the employment of women and children in unhealthy process, e. g., work in industries using in their manufacture lead, mercury, phosphorus, arsenic, and also night employment and the hazard of many occupations, can all be solved by statute or agreement. The National Labor Conference which meets in Washington next month will give consideration to many of these problems on which we have at present inadequate legislation or no legislation at all. But there is a vast field that spells poverty and untold suffering in the alleviation and cure of which the social workers must depend on the active cooperation of the medical profession.

The National Conference on Social Work has only recently shown the interdependence of poverty, disease, bad housing conditions, overwork and ignorance. Philanthropic endeavor in the past has been carried out only on empirical grounds and much money and effort has been wasted because the forces in that vast field of social pathology and its misery were not correlated, largely because the complexity of the problem was not understood or perhaps ignored. The attempt to eradicate social evils by men and women of lofty ideals and worthy purposes lacked the fruition it merited only because the work was undertaken in a spirit of doing "sweet charity," instead of being actuated by scientific motives and striking at the basic pathology. To get permanent results demands the cooperation of the numerous agencies that alone can offer any semblance of a cure: sociology, political economy, medicine and the education of the masses, and these all face a common problem.

Industrial and social work, in other words, must resolve itself into and assume the status of a science in order to reap the greatest ben-

efits. Many divergent forces in the past working in this field must be correlated. Fortunately, our educational institutions are incorporating in their curricula courses for the training of men and women in this work. Yale University, the University of Pennsylvania, the University of Minnesota, the University of Indiana, and other schools offer this work. Proficient workers with laboratory and clinical training are now entering the arena, and this phase of the subject promises much for the future.

Before passing over this subject of training for the social worker I feel called upon to acquiesce with others in lauding the epochmaking work done in the medical department of our State University, inaugurated and fostered by our dean, Dr. Charles P. Emerson. The social workers here work with and through the medical department and each individual case is given merited clinical study. Indiana, through the efforts of Doctor Emerson, has set an ideal of work which more and more will be copied by other states and municipalities. Doctor Emerson, however, in his able way will be glad to furnish us other information as to the work done in the medical department in this connection.

The medical profession, one of the many agencies, must play a prominent part in the evolution of social science. Hygiene and preventive medicine have inherent curative virtues. As the economic unit in our social structure we of the medical fraternity cannot allow selfishness to dominate our thought or action. Our efforts must henceforth embody utilitarian principles. It is not a matter of choice. Our duty is clear. Indeed, the physician who is indifferent and negligent in this matter and whose sympathies and endeavors have not been aroused, faces the alternative of becoming a parasite in our social order. It is to be regretted that we harbor in the profession a type of medicus to whom sociological problems and their solution are still as Utopian as in the matter of focal infection. Altruistic tendencies are as foreign to this individual as are the life-saving principles of medical research. These pill venders and mushroom operators, as such, soon will be looked on as derelicts in the profession. Indeed, the physician's field of action is steadily broadening and the men and women in the profession, true to their obligations, must heed the cry of the afflicted. In our semiquasi activities the incumbent must choose between profiteering and in due time go down in ignominy, or by doing his duty to build for the advent of a superman, align himself with the torch bearers in the onward march of civilization who feel the responsibility for social service.

Those of you who attended the Fifth Councillor District Meeting at Columbus last May were privileged to hear Saleeby of London, that masterful mind, on racial problems. He put

forth the astounding statement that though by nature an optimist he was safe in making the assertion that England in the next 100 years would suffer the decadence of Rome. Race suicide was inevitable because of sterility and physical degeneration due to the pernicious influence of so-called racial poisons as we recognize them in syphilis and alcohol, and also in the widespread gonorrheal infection of the young women. This not among the class of prostitutes but in the masses. He saw fit to add that it was a source of pleasure and an inspiration to watch our khaki-clad boys in the ranks while in France. The fine physique, the athletic stride, combined with the intelligence, manliness and courage to resist the vice of Europe gave him the vision that the only agency that can avert the annihilation of the Anglo-Saxon is the splendid manhood and womanhood of America. To us they look to redeem the race and perpetuate the same.

The vastness of the problem and clearly our responsibility has so forcefully been presented by the authors of the papers in this symposium. All departments of medicine, the obstetrician, the pediatrician, the surgeon, the neurologist, the dietician, the internist, the dermatologist, as also the ophthalmologist and otolaryngologist should feel their responsibility in this crisis of world history. Amelioration of existing vicious conditions sapping our life blood and the conservation of life in the new-born comes to us as a solemn duty. Prenatal care, obstetrical care and the care of the child during the preschool and school age must build for higher physical and moral standards. The problem is a large one, and surely is most vividly brought home in the paper by Dr. Schweitzer.

We must get away from the ancient idea that physical inferiority in the great masses of children are irremediable conditions. On the contrary, every delicate child is a sick child. And we need not accept such a conclusion on any arbitrary ground or on any vague criteria. There are several methods that now allow of standardization of the developing child and on comparative findings we can readily group the child into two classes, the physically normal and the physically defective. Time does not allow a detailed description of the means used in grading children. Suffice it to say that two methods are in use, one the age, height and weight standard, the other the Dumfermline scale, which in addition to age, height and weight takes into consideration muscular development, circulation and other physical findings in making such an evaluation.

When the announcement was made by the Bureau of Child Hygiene in our largest American city that between 12 and 15 per cent. of its schoolchildren were unfit, it came as a surprise and was met with much skepticism. However, when Manny, of the New York Association for Improving the Condition of the Poor, cor-

roborated these findings by reporting that as a result of study he found that at least one third of the schoolchildren were below normal standard of growth, the fact of the appalling condition helped to eliminate this skepticism and remedial agencies were immediately brought to the rescue, and today New York City through medical and nutritional care is overcoming the marked evidences of malnutrition. These findings in a single city can be duplicated in every city, village and hamlet in our country. The findings are appalling from the standpoint that nothing much in the past has been done to remedy these conditions. Those of use who have been examining year by year the child statistics such as Pirquet, Hamburger and others have prepared, have been impressed with the statement that up to 2 years tuberculosis as an infection is quite small, but that between 3 and 5 years from 10 to 15 per cent. of the children are infected, and at 16 years from 60 to 70 per cent. It seems to me that from every angle child hygiene imposes duties and that we cannot shirk responsibilities.

In closing this phase of the subject I want to call attention to two factors that have been responsible for much scientific data that have lifted this subject out of chaos, viz., first, our method of grading children, which has allowed definite standards to be adopted, and second, the agency that has made use of this and that adequate school inspection. In passing I want to make one criticism on much of our school inspection. As long as some of our school inspection ends by simply inspecting, the results for the money expended will not be what they should. There must be a follow-up system that will carry the life-saving principles of modern medicine into the homes. This brings me to the matter of school clinics and nutrition clinics, which time does not permit me to discuss.

There are 50,000 persons in the United States who are needlessly blind. There are several millions who are not blind, perhaps never will be blind, but who fail to realize their full efficiency by reason of defective eyesight or a wrong condition under which they work. Also ophthalmia neonatorum and the midwife are always presenting its problems. Medical school inspection has accomplished a great deal by discovering in a great many cases the cause of defective vision before it is too late to prevent further deterioration. Hereditary blindness, although generally not classed as preventable, is nevertheless preventable in so far as those afflicted with it should never have been born. Many other phases of ophthalmology and child hygiene could be touched on, but the time does not permit. Dr. Newcomb has so thoroughly emphasized the responsibility that rests on the profession that ophthalmology through the channels of his very able paper pleads for.

Dr. Brown, Superintendent of the Seattle School Clinic, in a paper read before the Clin-

ical Congress of Surgeons in Philadelphia three years ago, reported one in every twenty children examined as having albumin in their urine, due to tonsil infection; one in thirty children as having heart lesions, and that four out of every 100 older boys had to refrain from athletics because of valvular trouble due to tonsil infection. He also reported a 3 per cent. increase in efficiency following a campaign of tonsil removal. Dr. Layman has impressed on you the importance of the tonsil as a focus of infection with its wide range of secondary pathology. The ear is the natural teacher of speech. Deafness, deaf-mutism and that vast class of middle-ear pathology, all are of moment in a symposium such as we have had the pleasure of listening to this afternoon. Time does not permit the further discussion of this subject.

At any rate, the call for action has come. We surely must realize our responsibility, and I am sure that the medical profession will not shirk but will embody the ideals of social service expressed this afternoon and thereby, in the words of Krause of Johns Hopkins, "help to make our poor little, pale, stunted and frail creatures with sore eyes that shun the light, with lumpy necks and crooked backs and limpy, withered limbs, a memory and nothing more."

DR. WILLIAM A. HOLLIS (Hartford City): I have been considerably interested in child hygiene and child welfare for some time, and I think most physicians are. All that is written about child hygiene is not written by doctors, and all that is read on the subject is not read by doctors; neither is all the good advice on the management and rearing of children to be obtained from doctors. I am frequently surprised at the amount of information intelligent women and mothers have collected, and I am always very glad to learn from them. I do not think we take enough interest in child hygiene or child welfare, except once or twice a year, or when a convention is on.

The matter of school inspection is to my mind a very essential procedure, but one that is greatly neglected, even where there is school inspection. It is one thing to have a school inspector and another to have one who really inspects. Quite often it is more like the inspection of a railway train during a ten-minute stop when a man with a torch and a hammer goes up one side of the train and down the other and you do not get out five miles until there is a breakdown.

One point in Dr. Newcomb's paper is very important, and that is the matter of a cycloplegic in the examination of the eyes of young children. The cycloplegic should always be atropin. There should never be a compromise unless it is known that the child is myopic, and then homatropine may be used. So much damage can be done and so much time lost by the optometric method of putting glasses on schoolchildren. They are

compelled to wear them; they are told they must wear them, and how often you see a child slipping the glasses off or even hiding or losing them, and then when examination is made under a cycloplegic you see what a terrible mistake has been made. These things can be avoided to a great extent by the right sort of school inspection, with competent and conscientious advice. Better a school with intelligent teachers only, than one with an incompetent and indifferent inspector.

As to the matter of tonsillectomies and adenectomies, I thought Dr. Layman would go into his elaborate charts, which are the finest I have seen, and, I think, should be copied by every physician. There is not much danger of the pendulum in tonsillectomy and adenectomy swinging too far; the danger is in how the operation is done, how much trauma results. Some men who do not make a specialty of this work are doing it well, and for them I have no criticism; but too many of them are not doing it well.

MR. I. H. MILLER (Office of Food and Drug Commissioner): I can do little more than endorse what Dr. Layman has already said regarding the labeling of caustic alkalies. I think what may be said of caustic alkalies might also be said of poisons in general. Last spring I read a paper before the American Chemical Association in which I advocated a stricter control of the distribution of poisonous alkaloids. On investigation I found that in 1917 there was enough strychnin, either in the form of the drug *nux vomica* or salts of its alkaloid brought into the United States to kill more than four times the number of people living here, provided the average lethal dose was given. What becomes of the larger amount of this poison? Most of it is used in killing rats and other rodents and insects that prey on our crops and is thus handled very largely by persons who are ignorant of its potential dangers. I do believe that caustic alkalies should be labeled in such a way that the housewife will know it is one of the deadly corrosive poisons and should be handled as such.

In looking up the Indiana state law on this subject I find that concentrated lye is one of the chemicals specifically mentioned as being permitted to be sold by the common merchant without any specification as to its nature whatever. All other poisons are to be sold by licensed pharmacists, but this one can be sold without any indication as to its nature and by any merchant.

As to the manner in which we gain control over the sale of this poison as well as other poisons, I am rather at a loss to say. However, I am inclined to believe that we must so direct the matter that we can educate the public to the point where they are willing to ask their

legislators to act on this subject. I do not think there is any class of men so well qualified as the physicians, chemists and pharmacists who know the dangers lying in such chemicals and drugs. I know the pharmacist is already complaining of the great burden placed on him in the way of regulations as to labeling, but I do believe we have not fulfilled our duty to our children and the uninformed until we have obtained legislation that will secure the proper control of the distribution of these poisons. Most states have laws covering the distribution of poisons, including caustic alkalies. Indiana has no such law except the law covering narcotic poisons, which is practically the same as the federal law. I believe you are the logical people of the state to bring about a sentiment in favor of enacting a proper law for controlling the distribution of these poisons, thereby saving not only our children but a great many people who are ignorant of their nature from much suffering and in many cases death.

DR. GEORGE W. SPOHN (Elkhart): It has been my experience that there have been more children injured from the old-fashioned lye made from wood ashes than from the concentrated form, and if Mr. Miller should bring about some changes in the law it seems to me there should be something put in about teaching the mothers of the state to be more careful about the ordinary lye we get made from wood ashes.

I do not believe in the universal removal of tonsils. Having been at it for thirty-five years, I find there are so many mistakes made that we should be careful in our differential diagnosis. If it is necessary to remove them, do it; but if not, let them alone.

Referring to Dr. Newcomb's paper, there is, in my experience, one class especially where we have lack of development of the nerve of the eye. If these children are well nourished from childhood they do not have nearly so much trouble with the eyes; such children are generally hypermetropic. The teacher recognizes the myopes and sends them to some one for glasses. In the extreme hypermetropic one eye will function and the other will not. To save both eyes such children should wear full correction of glasses, changing the lenses as the eyes develop. By the time such children reach the age of 8 or 10 both eyes function and are normal in vision, with glasses.

DR. CHARLES STOLTZ (South Bend): School inspection should be more than looking into a child's throat for adenoid tissue and enlarged tonsils, and finding out if he has myopia. Very few school inspectors make a survey of the child as it should be done, and then go beyond that and ascertain the conditions in the home, the industrial life and the attitude of the family and community from which it comes. This is an industrial, sociologic and economic proposition

as well as a medical one, and I wish these papers might be read before the American Manufacturers' Association. Perhaps the ideas would sink in and do more good than to read them to us, for this is a commercial age and industrial conditions are a large factor in defective childhood.

There is a great deal of misinformation about defective youth. We have heard much about the grave defects found in the men of the American army. I came in contact with that situation and took the time to make an investigation and survey of 667 young men in the first draft. It was not venereal disease nor primary defectiveness that excluded most of our boys from the army. A very large percentage of the causes for rejection could be traced directly to industrial conditions. Of course the greatest number were excluded on account of vision. We were not required to go back and find out what depreciated the sight of the registrant, but I took occasion to make extensive inquiry and found in many instances that the eyes were damaged by violence in a factory, or ruined by the character of their work. This was especially true in the community in which I live—bad eyes, improper protection and use of the eyes. Dr. Shanklin took up this matter a few years ago and I think he deserves great credit for what he did in his community.

DR. J. W. PARRISH (Shelbyville): I want to ask two questions. Why are adenoids and tonsils more fully developed in childhood than at any other age, and why are they more easily infected?

DR. HUGO O. PANTZER (Indianapolis): The essayists and discussants have touched a fundamental subject. I wish here to take up but one point. Perspicacity has long time ordained that in the diagnosis of the individual case all preceding diseases shall have regardful consideration. How little is this observed in daily practice! For example, take up 1,000 case records, and 999 show only perfunctory reference to past diseases in words such as, "Has had the ordinary diseases of childhood" without qualifying remarks indicating the kind, severity and sequelae, if any, of these diseases. Quite a number of those so afflicted do not make full recoveries, and in their majority continue to harbor the disease germs in one or more foci with the effect of recurrently suffering by them, or that they themselves constitute effective carriers of such diseases and thereby menace the life and health of others.

Well established as is the effective transmissibility of tuberculosis and syphilis, as yet we consider too little the similar part played by other infectious diseases. Of many relevant observations, let me here cite one of unusual interest. A mother during a child-bed had a severe attack of scarlet fever; the female child

born to her in this period took the same disease ten days later; and this female at 20 years gave birth to a female child which within the early weeks of life developed scarlet fever, without concomitant cases to explain it. These three females were bleeders, notably had much trouble with menorrhagia and metrorrhagia. The two elder had but few pregnancies in long married lives and, probably, several miscarriages; also they had greatly premature menopause. The woman of the third generation at 20 years had diseased tonsils removed, and since then during two years has had normal menstrual discharge. It seems fair to surmise that the germ of a virulent scarlet fever thus lived through three generations, bringing great disability and debility to its carriers, and with the probability of having unobservedly extended its ravages to other individuals in the long meantime. Regarding the hemophilia here mentioned, and other cases observed by me, I feel warranted in assuming that hemophilia after all may be an infectious disease rather than a physiological family trait or weakness.

DR. ADA E. SCHWEITZER (Indianapolis): I think Dr. Spohn must have misunderstood me. These children were not really mentally defective. They had defective hearing, and when that was improved they progressed normally. We had a survey in South Carolina under government supervision. In one of these schools six second grade pupils were unable to progress. The teacher wanted us to make an examination and find out why it was they did not advance. Eighteen were brought instead of six. We found one boy who had defective hearing to such an extent that he was unable to keep up with the other children. We questioned him in various ways and when he was directly in front of us and could watch our lips he answered in a very alert manner. His mentality was not affected, he was simply classed as dull because of his hearing. Two could not see well. One little girl was unable to advance because she was tired all the time. We found that she was an orphan, living with her grandmother, who was very feeble, and doing all the work. She was only 11.

In our work we want to establish health centers where the young and old can play and work together, where they can have health examinations. We propose in the outlines we send out for our medical examinations of children to have the previous history of the child included. We hope that every doctor in Indiana will be sufficiently interested to fill out these charts completely so that we will have a health record of every child in Indiana. We want the school-children given credit for good health as well as good mentality.

DR. DANIEL W. LAYMAN (Indianapolis): I hope you will remember what Mr. Miller has

said about caustic alkalies. This is a big subject. It has been brought up in the Laryngology section of the American Medical Association and they have gone so far as to appoint a committee, of which Dr. Thomas Hubbard of Toledo is chairman, on the labeling of alkalies. Dr. Hubbard wrote me that the best way to accomplish this is by influencing legislation in our own state and compelling the manufacturers to label these caustic alkalies as poison. As to the question, Why are adenoids and tonsils more developed in children and why are they more easily infected? Of course in a child the air spaces are smaller than in an adult, and if the respiratory passages do not have free ventilation and drainage there is stagnation there and the germs are more apt to develop and cause the various complications. Besides, a child has not had the time, has not lived long enough, to develop or establish immunity to the various infections.

MENINGITIS—NEUROLOGIC MANIFESTATIONS *

C. D. HUMES, M.D.
INDIANAPOLIS

The particular manifestations of meningitis which we call to your attention is the actual involvement of neurologic structures, namely, the inflammation of the pia mater which, strictly speaking, defines infectious meningitis. The manifestations of the disease vary in exact proportion to the degree of pial inflammation. The difference in location, whether selecting the entire pia both of brain and cord, the convexity or base, small area or large, will cause a great difference in the symptomatology; that is, the signs and symptoms which we interpret in terms of neurology but in a general way the pathology is the same.

After a short period of hyperaemia, the congested pia becomes covered with an exudation of serum, lymph, fibrin and pus, the serum infiltrating its meshes and collecting between the pia and the brain, producing a degree of edema. The subarachnoid space is filled also, making it appear to contain cysts.

The fibrin is deposited in flakes on or in the pia, rendering it less transparent than normal. The pus is infiltrated through the meshes of the pia and as it increases in amount, it fills up the space between the convolutions along the line where the pia dips down. Then it collects in the sulci and finally forms masses of yellowish-

green color, covering the surface and filling up the spaces.

At this point in the pathologic picture we must leave simple meningitis and only this far can we claim its identity. The cortex of the brain soon becomes affected with this serous and purulent exudation and at that time as in fact in every case, one has to deal with a meningo-encephalitis. It is under the caption of meningitis generally described and accepted so, that we accept these neighborhood complications as a part of all meningeal involvements, certainly of all those which approach the type of severity which manifests profound neurologic syndrome or has left in its wake of inflammation the varied neurologic defects.

The cortex becomes greatly congested and small hemorrhages and collections of pus are found wherever the pia vessels have dipped into the cortex.

The pia covering the cerebellum and the cranial nerves is similarly affected and in the combined cerebrospinal type the entire length of the spinal cord may be inflamed and covered with lymph and pus so that from the simple meningitis we have developed finally the combined meningo-encephalomyelitis. The inflammation follows the pia into the ventricles and here a similar process goes on resulting in an effusion and consequent distention of the ventricle and serum which soon like the other affected area contains floculi of fibrin and pus. The cerebrospinal fluid contains all these products of inflammation corroborated by puncture and examination, more of which I shall speak later.

Hydrocephalus.—Following this accumulation of fluid in the ventricles in cases of infants, if no relief obtains within an average period of seven to ten days, a distension of the skull commences resulting in a separation of the sutures and consequent hydrocephalus. It may be said that the distention and cranial deformity is the result of mechanical rather than pathologic disturbance after the communicates between the ventricles and subarachnoid space has been obstructed by adhesions. The choroid plexus of the ventricles which secretes the cerebrospinal fluid and acts also as a physiologic barrier between the blood stream on the one hand and the cerebrospinal fluid on the other so that as the resistance is gradually broken down by the infected blood stream, we are confronted with both a hyperactive gland and a leaky barrier and unable to protect the ventricles from a generalized blood stream infection.

* Read before the Indiana State Medical Association at the Indianapolis Session, September, 1919.

This condition obtains particularly of course in the septic meningitis, any form of the disease due to a micro-organism. The entire pia of the convexity and the base may be involved as in the epidemic form while in the septic and secondary forms the pia of the convexity is affected and the base may escape. In meningitis of all infants the base is particularly affected, thus accounting for the frequent formation of hydrocephalus.

Tubercular meningitis which rarely has an exudation of pus is actually a deposit of miliary tubercles through the pia, small bodies appearing along the blood vessels and always confined on their walls. An exudation of serum, lymph and fibrin occurs, producing a thick mucilaginous fluid which imbeds the tubercles. A diffuse encephalitis localized or general may accompany tubercular meningitis.

Syphilitic meningitis is characterized by a serous and fibrinous exudation with a deposit of a gummy material semitranslucent, which surrounds the nerves and fills up the spaces in the base or in the sulci of the convexity. It is not attended by a production of pus and seldom is there an exudation in the ventricles. The cranial nerves are invaded and become the victim of a degenerative neuritis. There is a production of connective tissue which causes the firm adhesion of the pia to the dura and brain.

I have no statistics to offer but rather from my personal experience, I wish to refer to certain conditions which seemingly without cause I cannot help associating directly with chronic affections of meningitis. I refer especially to the undifferentiated group of idiopathic epilepsy whose painstaking history usually reveals nothing of importance except some questionable traces of gastro-intestinal colic in babyhood which seemed to provoke spasms and from this, taking the parents' statement as a fact, has grown this sarcastic syndrome known as epilepsy.

The fact that neural insults are so different that few of us are able to interpret the signs of the young makes it seem reasonable that a great number of true meningeal affections may occur with so little manifestation that their proper recognition is impossible.

Because of the similarity of the spinal fluid in chronic meningitis and epilepsy, so called, I further associate the two conditions. In both cases there has developed a fact which I think stands without question, namely that the cerebrospinal fluid in idiopathic epilepsy and in chronic meningitis does not reduce Fehling's. I

refer for confirmation of these facts to the chart as taken from the work of Prof. to which I shall refer later.

Associated with epilepsy is the allied psychic disorder of mental defectives. While I do not wish to infer that all the mental calamities are directly traceable to pathologic changes, yet, I am offering this as a personal caution as well lest we pass unnoticed in our daily classification of actual pathology when it does exist. In my personal experience of the last few years, I have reconciled myself to the fact that a very large percentage of our epileptics and mental defectives have been the victim in early babyhood or adult life, of intraspinal pathology. So far as the neurologic symptoms are concerned, we can accept this general statement as a fact; that no part of the central nervous system is invulnerable to infection or affliction so that as surely as the convexity or the base of the brain is infected, any or all of the adjacent structures may be singly or collectively affected with arrested function producing any or all the disturbances of the special senses, interrupting the reflex arcs, irritating the centers of motion, interrupting pathways of movement and blunting or blocking the afferent pathways, interfering with the visceral functions, approaching trophic disturbance, manifesting an early or late, partial or complete loss of function in its entirety and obscuring the entire clinical picture with a veil of mental cloudiness and profound psychic reaction.

I not only wish to emphasize in my statement of the possibilities of these consequences of meningeal affection but to lay particular stress on the fact that the pathology of the meninges offers the only original explanation of their causation in the absence of traumatism, gross hemorrhage, etc. In the face of a crisis of pneumonia in the conflicting of endocardiac lesions in all diseases of intense toxic element one is apt to forget the highly sensitive nervous system except as a means of portraying symptoms and signs of intelligent co-operation.

I wish to call attention to the most important factor, the manifestation of the greatest and most important part of every neurologic examination and itself a true neurologic product in health or disease, namely, a discussion of spinal fluids taken from the work of Professor Mes-treztat from the University at Montpellier, France, who has made some very exhaustive researches and has published one huge volume of the normal pathologic cerebrospinal fluid.

It is within his observation that spinal fluids

of all forms of meningitis have an extremely small proportion of glucose and chlorides. He has established the normal pressure, physical characters, albumen, glucose, chlorides, the entire amount of organic material and has separated the chemistry of the spinal fluid into a practical working basis. His splendid compilation, covering as it does the researches in all lines of medicine should leave no doubt in the minds of any as to the merit of spinal fluid study in all forms of systemic diseases. If that be the fact, there can be no excuse for the most detailed examination possible in all affections of the nervous system.

It would be indeed a repetition to detail the many symptoms of either the more direct meningeal involvement characteristic of poliomyelitis or of the meningeal manifestation of systemic infection but I would refer to the few cardinal ones, namely, pain, temperature, delirium, unconsciousness and the various types of motor and sensory paralyses. Practically all of these symptoms could be related to general diseases and of course the neurologic signs of any gross insult to the brain and cord.

In making a clear-cut distinction between an involvement of the meninges from the underlying structures of either brain or cord, we are compelled to inspect, examine and re-examine perhaps many times in early meningitis or as many times more in tubercular meningitis before definitely establishing a diagnosis. Personally I consider a negative diagnosis of meningitis more important to the patient than a positive one. By that I mean its value in ultimate prognosis. It has been commonly observed that the most virulent gross pathology has exhibited early in the disease an apparently negative spinal fluid so that repeated examinations are necessary in conjunction with the clinical signs. Palsies and paresis speak always for an involvement of the brain or cord as mentioned before, reckoning with an extension of the pial inflammation into the brain substance producing pathology entirely independent of any true meningeal inflammation.

When a myelitis obtains, then the limited area of anesthesia will define it and with its increase or decrease mark a pathologic limit.

It can be said of meningitis that it has completely subsided and left no mark when there remains no complaint of pain or physical disturbance or unrest comparable to the nerve distribution and the nerve functions and on painstaking examination there is found to be no defect of special senses, disturbance of in-

voluntary or voluntary functions as well and this free period must have extended over a sufficient number of months or years to have removed all doubt and question.

The cervicobronchial, lumbo and sacral types of neuritis are oftentimes as immune to treatment as they are obscure in origin and I believe that a vast majority of cases are the result of meningeal changes.

In conclusion I offer the suggestion of a relationship between meningitis and psychomotor disturbances entirely upon the comparative values of the sugar carrying power of their spinal fluid and to stimulate a more exhaustive research into these so-called idiopathic syndromes.

DISCUSSION

DR. C. NORMAN HOWARD, Warsaw: Meningococcus infection is of extreme interest to us all, for sooner or later it will reach us in our practice, no matter what particular line of work we are pursuing.

In discussing it as a member of the Eye, Ear Nose and Throat Section of our Association, I would like to emphasize the point that these structures may harbor the meningococcus with or without immediate signs of trouble in the central nervous system. This being also true of other regions of the body, brings us to the point made by Doctor MacDonald, that we must see clearly the more recent idea that the disease is essentially a general meningococcus septicemia, striking where it will. Of course it is usually more immediately severe within the coverings of the brain and cord, but not necessarily so.

Sometimes remote regions of the body fly such strong signals of distress that the real nature of the attacking force is veiled. There come reports from various observers in different parts of the world which bring home the need of being alert to this more insidious form of attack. For instance, in April, 1917, in one of the Italian journals the gastrointestinal symptoms were reported as entirely masking the so-called typical ones. A year or two ago the serum institute at Copenhagen called attention to certain atypical variations with slight or no meningeal symptoms. Back in 1916, Doctor Elliott, in the *Lancet* of December 16, reports a case of meningococcus infection without involvement of the cerebrospinal system. Doctors Ker and Douglas, in the medical journal for Australia, April 1916, report a meningococcus infection of the conjunctiva without involvement of the meninges, in a nurse on duty in a meningococcus isolation hospital. G. Pisano reports three cases—one diagnosed as malaria, another as traumatic

purulent ophthalmia, and another as purulent otitis media.

We, too, have had this disease come sailing up without flying its textbook colors. During the war a patient was brought to the Walter Reed hospital suffering from intense involvement of the anterior segment of one eye. It appeared to be a traumatic ophthalmia, but there was no history of injury. The eye condition was the outstanding, dominant symptom, and for that reason the patient was sent to our service. There was something uncanny about its unknown origin, so we attacked the mystery. The medical service was called in consultation and the patient kept under observation. Very shortly he developed additional symptoms revealing that we had to deal with a case of cerebrospinal meningitis. Evisceration was decided on to remove the focus of infection. This procedure was undertaken in a way calculated to give most consideration to uninvolved structures. The anterior chamber was filled with an exudate of soft cataract, but the posterior capsule was found intact and the vitreous discovered to be practically clear. As the trouble seemed to be confined to the anterior segment of the eye, the evisceration was not continued but stopped at the removal of the diseased portion, resulting practically in a cataract operation. Later, however, the eye went on to a panophthalmitis and enucleation was done. The patient recovered. The final conclusion was that the eye condition was due to a metastasis.

Eye involvement in cerebrospinal meningitis was formerly thought to be due to extension along the arachnoid spaces of the optic nerve. That thought is perhaps still held to some extent, but the growing belief is that the infection reaches the eye through the blood stream.

The ear can and does feel the ugly touch of this far-reaching malady, sometimes the middle and sometimes the internal ear. Rogers and Baldewick report involvement of the internal ear in 25 per cent. of a series of 35 cases of cerebrospinal meningitis.

The nose and throat are not so apt to suffer from the disease, although there have been instances of meningococcus inflammation of the tonsils. The most important point in regard to the naso-pharynx is that it harbors the meningococcus. The carrier either sneezes or coughs it forth from the naso-pharynx to the disaster of all potential patients who inhale the laden droplets, which thus find a lodging in another naso-pharynx. As Doctor MacDonald has pointed out, that is the way it is considered to be disseminated; that also accounts for the occasional sporadic case, for they can arise at any time a carrier has passed that way.

After the meningococcus lodges on the mucous membrane of the naso-pharynx, in one

who is not immune, it is thought that it passes into the blood stream and produces its havoc through that channel rather than up through the cribriform plate to the meninges of the brain as was formerly the more general belief.

I would like to emphasize the need of those in authority examining suspected carriers by passing the cotton-wound applicator through the nares clear back to the posterior wall of the pharynx. If the culture made from this secretion is found to be positive, then the logical procedure lies in isolating the carrier and endeavoring to eliminate from his naso-pharynx the lurking germs that menace.

DR. A. C. KIMBERLIN, Indianapolis: As Doctor Humes has told us in his paper, there is something worse than death as a result of meningitis, and that is the after-effects. The diagnosis is made in two ways—clinically, which is very uncertain and very difficult, and bacteriologically, which is positive and relatively easy if you have the equipment and take the time. As Doctor MacDonald stated, the diagnosis is not always easy bacteriologically. I remember one case that, clinically, looked suspicious of epidemic meningitis. We made a puncture and secured a small amount of clear fluid. Doctor Erdman took this and in ten minutes he had confirmed the diagnosis. It was very plain, there was nothing more to be said or done. That case had hardly arrived at the hospital until we had a positive diagnosis. On the other hand, on another occasion I made repeated punctures and efforts to find the specific organism but failed, utterly failed. I think what Doctor MacDonald said about the repeated and free withdrawal of fluid should be emphasized, for we are told that the organism is apt to lodge, not in the spinal canal, but in the region of the choroid plexus.

The diagnosis concerns us most. You are called to see a suspected case. It may present a very plain history, or it may not show anything even suggestive, as you pass it by lightly and it turns out as has been related here, a case of epidemic meningitis. As the doctor has told us, the first manifestation of this meningitis may be an infection of the eye. We are at a loss how to approach that situation, and the only way may be by enucleation.

We had one case which early was thought to be hysterical. The patient was a girl 14 years old who for some reason or other did not want to go to school. Her mother remonstrated with her to no avail. She fell in a sort of hysterical fit; would answer questions perfectly, but would immediately relapse into indifference. I saw the case two days later. She had a little temperature, took enough food, but would lie there perfectly indifferent to things about her, although she would answer questions. We made

a spinal puncture, more in desperation than anything else. On the third puncture the specific organism was found. The first time we replaced the fluid with serum. Of course that case died. This was one instance where it was quite impossible to recognize the condition as meningitis except by the bacteriologic findings in the spinal fluid.

I recall one other case which was isolated as a sporadic type of epidemic meningitis. There was abundant evidence of meningitis. We did a puncture. It did not have the appearance of specific meningitis, but fortunately we were able to find many tubercle bacilli. The clinical diagnosis is the most important, as all get a chance at it, though usually the most difficult.

When you are called to see a case be sure to make your examination, as far as elimination is concerned, very thorough. If you find nothing of diagnostic importance in the history or physical findings and there is a suggestion of nervous involvement, you must not rely alone on the pupils, the stiff neck, the reflexes, because they do not come in order. You take a view of the whole field as it concerns the condition of the central nervous system. You fear or suspect epidemic meningitis, but it is much more likely to turn out to be tubercular meningitis if it be an isolated case. It may be syphilitic, it may be pneumococcic, it may be influenza; you have all these to keep before you, remembering that tuberculosis in all of these isolated cases by all odds will predominate in number. During an epidemic of meningitis everyone is alert and mistaken diagnoses are fewer.

One case we had that came to the hospital as one of meningitis. He had a very severe headache, high temperature, hyperesthesia, much vomiting; in the main a set of symptoms which one must always keep in mind in these cases. It looked like meningitis because we could find nothing anywhere else. He was a moderate alcoholic and denied syphilis. Doctor Garshwiler did a spinal puncture and found a very turbid fluid. He immediately turned him over to me because he said that was not in his line, that turbid fluid did not mean syphilis. The man's temperature was up to 104.5; the bacteriologic test was a failure. Three days later we made another puncture. The spinal fluid showed 3,660 cells per c.c. Seventy-eight were polys, all the rest were large lymphocytes. The white blood count was 26,000, of which 82 were polys. A week later he showed a white count of 16,000, and finally the last count four days later showed 14,600 white blood cells. There was no differential count made at this time. Strange to say, this patient got well. Both a blood and spinal fluid Wassermann were done. The blood showed a 4+ Wassermann, but his spinal fluid each time was negative. The spinal

fluid of this patient showed a typical Gram positive diplococcus. It was pneumonia, pure and simple, so far as the laboratory findings and clinical symptoms were concerned.

So in approaching these cases where you are not able to diagnose the specific disease and you have in mind possible meningitis, do not think the symptoms will present themselves in the same order or the same degree in all cases. If you have access to a good laboratory it is a great help in making a diagnosis; otherwise, isolate the patients until you are sure. So far as prevention is concerned, there is only one means of prevention, and that is isolation.

DR. CHARLES D. HUMES, Indianapolis: I wish to refer to one case I was called to see that had been unconscious for twenty-four hours. There was no history of any previous illness. I removed more than 80 c.c. of spinal fluid. Doctor Langdon and his assistants made one hundred slides before the tubercle bacillus was found. That emphasizes the point of the importance of persistence in the examination of spinal fluid where tuberculosis is suspected.

I also wish to refer to simple meningitis as that form in which the pia-arachnoid alone are affected. These are the cases which recover. The cases of profound mental disturbance are those that have involvement of the brain. Paresthesia of extremities and trunk indicate beginning myelitis. I wish to call attention to the fact that when the pia and dura become adherent, certainly you will have permanent mental disturbance or permanent physical disability resultant from the blocking of the cerebrospinal fluid both in its circulation and absorption.

DR. JOHN A. MACDONALD, Indianapolis: I wish I could be as confident in performing a diagnostic puncture as I have been in the past. As it is, I require much more definite and compelling reasons for undertaking this procedure than formerly. It is not an operation to consider lightly. One should know as much about a patient as possible before making a spinal puncture. Recalling the work of Wegeforth, already quoted, it seems not unlikely that meningitis is brought about from spinal puncture by altering the intraspinal pressure in the presence of existing bacteremia, and in my opinion pneumococcus meningitis may be produced by spinal puncture in the presence of pneumonia. Reasoning from this, tubercular meningitis may result from spinal puncture in the presence of tuberculous bacteremia, so I feel that in the future I will make every attempt when suspicion is entertained of meningococcus meningitis to establish a diagnosis first by means of bacteriologic examination of the naso-pharynx and blood, except, of course, where the clinical evidence is so compelling that the indication for diagnostic puncture becomes clearly imperative.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

MARCH 15, 1920

EDITORIALS

COMPULSORY HEALTH INSURANCE

It is very evident that the Indiana legislature at an early session will be called on to consider the subject of compulsory health insurance, and we warn the members of the Indiana medical profession to be on guard if they are to prevent the enactment of legislation that will be a menace to the interests of medical men, to say nothing of being of little or no value to the public. Our committee on Civic and Industrial Relations, inaugurated this year, has plenty of work cut out for it in studying the subject of compulsory health insurance and equipping itself with such data as will be found necessary in order to speak intelligently for the profession on the subject. Already the Council on Public Health and Education of the American Medical Association, the president of the American Medical Association, and a certain Dr. Rubinow, the latter in a dual rôle of representative of the American Medical Association and paid employee of the American League of Labor Legislation, are accused by the journals of the state medical societies of New York, Illinois and Michigan, with taking a startling as well as a threatening stand concerning compulsory health insurance. It would be well for the members of the Indiana State Medical Association to decide whether a few officers of the American Medical Association are going to railroad us all into the support of compulsory health insurance, or be compelled to submit to a decision from the majority of the members of the American Medical Association on a question of such vital interest. While we feel that the subject of compulsory health insurance should be studied carefully, and its merits and demerits presented before the rank and file of the medical profession, we have only condemnation for the plan of a certain group of medical men, aided by a few labor leaders, to introduce compulsory health insurance bills in various states of the Union and secure prompt action on the same before the profession has had an opportunity of knowing exactly what they are up against. That

the Indiana medical profession may know what is going on, and some of the methods that are being pursued, we reproduce in part from *The Journal of the Michigan State Medical Society* an editorial concerning some of the activities in connection with compulsory health insurance, which is as follows:

1. All the agitation, all the framing of bills and their introduction into the various state legislatures have been prepared under the auspices of the American Association for Labor Legislation with headquarters in New York City. The secretary is John B. Andrews, and the letterheads bear the names of Alexander Lambert, I. M. Rubinow, Andrew Fusereth, of the Seaman's Union; John Mitchell, labor leader; Royal Meeker, labor commissioner, Washington; Jane Addams, Samuel A. Lewisohn and a sprinkling of more or less well known people in social work and politics.

2. This labor legislation association has had its bill for compulsory insurance introduced in nine states to date—New York, New Jersey, Massachusetts, Connecticut, Pennsylvania, Ohio, Illinois, Wisconsin and California.

3. Commissions were appointed in eight states to study and report on the measure. The first Massachusetts commission reported in favor of the plan. A second commission reported against it and several attempts by the advocates to incorporate provisions for compulsory insurance in the new constitution have failed. Wisconsin and Connecticut reported flatly against it. New Jersey and Ohio reported in favor. Illinois and Pennsylvania asked for more time for consideration. Later Illinois reported against it.

4. Two commissions with Dr. Rubinow as paid expert counsel reported in favor of the social insurance in California. Dr. Rubinow conducted an active campaign in its favor but when it was put to a referendum vote, the people of California voted it down almost three to one. There were 358,324 votes against and only 133,858 in favor.

5. New York has been fighting for three years. In a letter to me, dated Nov. 20, 1919, John B. Andrews, secretary of the American Association for Labor Legislation, wrote:

"Under separate cover, I am sending you a copy of the health insurance bill as it passed the senate of New York last April. It failed to pass the house due to the autocratic action of the speaker who held the bill in committee."

6. In 1917, the American Medical Association took the stand that it would be neutral on this question and advised its study by state commissions. In 1920 the American Medical Association is still assuming to be neutral and is advising us to be neutral.

7. While we are advised to be neutral, the president of the American Medical Association and Dr. Rubinow, who had been chairman of

the national investigating committee for the American Medical Association, are fighting in the open, shoulder to shoulder, with this American Association for Labor Legislation, and thereby carrying the impression that the great American Medical Association is behind the scheme.

8. The president of the American Medical Association and Dr. Rubinow have taken this position in the face of the fact that according to Dr. Green, secretary of the Council on Public Instruction, an overwhelming majority of the medical profession have been against the plan, in the majority of states in which compulsory insurance has been discussed. Dr. Green wrote me under date of Nov. 20, 1919:

"Unfortunately, in the majority of states in which this question has come up for discussion, the medical profession has been divided into two camps: the first a small group, influenced by the attitude of theoretical sociologists in favor of the plan, and an overwhelming majority who were violently opposed to the proposition without investigation, because they feared it would interfere with their business.

9. We must assume that the medical profession of New York are men of at least ordinary brains and intelligence and if after three years of fighting and propaganda, they are still opposed to the measure, it would seem that the purpose of further delay for investigation was not prompted by a desire to educate but in a determined effort to tire out the opponents of social insurance. Particularly, when you consider the attitude of Dr. Lambert, president of the American Medical Association. His association is pledged to neutrality, but as president he does not seem to be bound by the laws of the Association.

10. New York is entering on its fourth year of fighting this measure. These men believe that the proposed compulsory insurance is a menace not only to the worker, himself, but to the taxpayer and citizen and that it means the death blow to the practice of medicine. What support are they receiving from the Association and its official journal? *The Journal* says that New York will be a good state in which to make a test and nothing more.

11. The Schenectady County Medical Society of New York has raised the issue squarely. They ask the aid of Michigan in finding out whom the officers of the American Medical Association represent. Is it the men who elected them to their offices or do they represent the American Association of Labor? Shall an association be pledged to neutrality and its officers and journal permitted to send out propaganda in favor of a measure which is being bitterly fought in many states?

12. "The strength of the wolf is the pack and the strength of the pack is the wolf." At best,

this question of compulsory medical insurance is of very questionable value to the American citizen, be he laborer, professional man or ordinary citizen. It has worked out badly in many places where it was tried. In one country there were 1,100 strikes of physicians; but be its merits or demerits what they may be, can we afford to let an association and a journal which has been built up the efforts and money of the medical fraternity be turned over to any association whether it be labor legislation or any one else without the consent of its members? This is what is being done today by the president of the American Medical Association and the propaganda sent out by the American Medical Association.

13. To remain neutral, while the opposition smashes down defenses and builds intrenchments, does not seem a very wise policy.

THE DOCTOR'S RELATION TO THE CHURCH

The question often is asked, "Why do so many of the best men in the medical profession shun the churches?" The question is easily answered. Self-respecting physicians, even though religiously inclined, are thoroughly disgusted with the attitude of many preachers and ardent church members who faun on and cater to the most disreputable medical quacks and medical religious hypocrites who play the churches for commercial advantage. What does the self-respecting and honorable physician think of ministers and deacons of churches who frankly admit that they would like to employ the best medical talent in the community but feel compelled to employ the medically incompetent and perhaps all-around shyster because of the established precedent which requires that the minister and the deacons shall patronize a doctor who is a member of their church. We have never quite understood why identification with the church, of itself and alone, should be considered a ticket to a comfortable practice from the communicants of that particular church. To our notion religion and church attendance should be divorced from commercialism, and it is nothing short of the rankest hypocrisy to show preferment to an arrant quack or a notoriously incompetent doctor simply because he occupies a front pew in a church on Sunday and with a forced piety attempts to prove that he is a disciple of the lowly Nazarene.

We have in mind a doctor, incompetent, guilty of illegal practices, generally as crooked as a boar's hind leg, and denied recognition by reputable physicians, who not only is defended and extolled by a well known minister, but ac-

tually is invited to address the members of the church on medical subjects, and insult is added to injury by publishing in the daily papers a cordial invitation to the public to attend. Is it any wonder that the better class of medical men, even though they naturally would be inclined to support churches, are nauseated to such an extent that they unfairly get the reputation of being unbelievers?

We are not opposed to churches, and we believe in the principles represented by the churches, but we do believe that the average church needs a thorough fumigation before it can hope to get some self-respecting and thinking people to identify themselves with it. The church that tolerates, encourages and supports a doctor commonly known to be incompetent and disreputable is just as guilty of fraud as the individual or firm that sells sand for sugar. We ought to encounter as much honesty and respectability in the conduct of our churches as we encounter elsewhere, but until most of our churches quit playing into the hands of *any* doctors, but especially the incompetent and disreputable doctors, there will be no great stampede among many of the better class of medical men to get under a church roof on Sunday morning.

The really good doctor likes to feel that he is patronized because of his ability and not because of his membership in any church or lodge. He likes to obtain and enjoy his religious affiliation untainted with the commercialism which so often is encountered and made a part of church association. His indifference to the church is not due to lack of sympathy with the aims and objects of the church, but is an expression of protest against the hypocritical policy pursued by most churches in putting the stamp of approval on men because of their church affiliation rather than because of their real merit. The doctor may remain out of the church, but he still may be better morally and come nearer to getting into heaven than the medical hypocrite who comes to church late on Sunday so that all may see him enter, occupies a front pew, and prays the loudest at the Wednesday night prayer-meeting.

THE physicians who desire to prescribe liquor are required to secure permits from the internal revenue office, together with special prescription blanks. The Commissioner of Internal Revenue has issued a special circular giving explicit directions concerning the subject which should be procured by all those physicians who are interested.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

CULTIVATE the acquaintance of your senator and representative. Put forth a special effort in this direction. Later on you may be asked to make use of the acquaintance, so pave the way now.

How much are you doing to support your county medical society? Are you a regular attendant at meetings, or are you one of the slackers? Or, worse still, are you one of the kickers? Better turn over a new leaf and put your shoulder to the wheel. It will help you more than anyone else.

It is announced that the Indiana Society for Medical Freedom has held a meeting and determined to oppose certain legislation pertaining to medical affairs which it is thought will be brought before the special session of the legislature. It is a safe bet that these kickers represent the quacks, the impostors, and the incompetents who desire to practice medicine but who are unable to comply with the present requirements.

THE Indiana University will hold its centennial celebration during the first week of May, and Wednesday, May 5, will be given over to the medical exercises at Indianapolis with speakers of international reputation on the program. This promises to be a very interesting occasion and every physician in the state is cordially invited to attend. In the correspondence department of this number of THE JOURNAL we publish a letter from Dr. Charles P. Emerson, dean of the Medical Department of the University, concerning the matter.

THIS seems to be a good year for the doctor in politics. General Wood, who holds a medical degree, is a candidate for the highest gift in the hands of the nation, and Dr. McCulloch, a member of the regular medical profession of Indianapolis, is a candidate for governor of Indiana. Here is hoping that if either or both of the gentlemen are successful in securing the nomination and afterward are elected they will use the influence of their high offices for the betterment of all that pertains to health and the laws governing the practice of the healing art.

WE still receive letters from members of our association complaining because they do not receive *THE JOURNAL*, who do not take into consideration that change of address, failure to pay dues, and poor mail service are causes for failing to receive *THE JOURNAL*. It may be well to remind our readers that we never fail to pay attention to requests for change of mailing address or duplicate copies to complete files. If any one does not receive *THE JOURNAL* when he thinks he is entitled to it he should write at once to *THE JOURNAL* asking for an investigation of the matter and the request will receive prompt and careful attention.

SOME of the lay papers are complaining because doctors in general have raised their fees. Why shouldn't they raise their fees? There is no service that is more deserving of adequate compensation than the services rendered by the medical man, and every one knows that the fees of the average doctor have been low enough at all times, and even in the present times of high prices and increased rates for every other vocation. It would be idiotic to expect the doctor to trail along with starvation fees. Of course the doctor can be gouged by the plumber, the carpenter, the groceryman, and the produce man, but he should not retaliate!

WE are satisfied that a very large proportion of the medical men of this country are opposed to compulsory insurance or will be opposed to it when the subject is given the studious and analytic consideration it deserves. Before any officers presume to speak for the American Medical Association let us have the subject thoroughly investigated by a responsible com-

mittee and approval withheld until an overwhelming majority of the delegates are found favorable to such a plan.

THIS year will be a great year for politics, and it may not be amiss for the medical man to find out the attitude of various candidates for political offices toward medical and public health questions. There is absolutely no reason why doctors should vote for office-seekers who are known to be antagonistic to the medical profession, the establishment of right and progressive standards for the practice of medicine, and approved health legislation. The time to settle the question is before nominations are made, but if failure attends the effort to place prospective candidates on record an opportunity is offered in the ballot to satisfy the principles of medical men.

WELL, anyway, we have quit sweating blood over our income tax reports, though we may sweat more blood before we pay all of the installments. Then there is the ever possible notification that an error in the return has been made and that a penalty has been taxed. Incidentally, the government is a party to a species of low down gouging when it awards federal officers a considerable portion of the penalties that may be affixed for errors either intentionally or unintentionally made. Perhaps the man who has not sufficient income to place him in the taxable class can be thankful, though it remains to be seen if some method will not be devised whereby every individual will be squeezed for something to help pay for the extravagance and mismanagement of Uncle Sam.

WE are not saying anything more about the payment of dues except to urge county secretaries to remind the delinquent members of their respective societies that failure to pay dues on February 1 has resulted in the loss of the medical defense feature of the association up to and including the time when the dues are paid again. In reality this loss of medical defense may be a serious matter and an expensive loss, as some doctors in Indiana can testify. Already there are three doctors in Indiana who through carelessness and procrastination in paying medical society dues have been denied medical defense by the association in malpractice suits, and, of course, this means the loss of perhaps several hundred dollars for attorney's fees which might have been saved.

GREASY CREEK, Ky., boasts of having a physically and mentally active resident 137 years of age, and who, to make the story more interesting, is the father of a 5-year-old son. Evidently Ponce de Leon overlooked Greasy Creek, Ky., in his quest for the fountain of youth, but it remains to be seen if a lot of comparatively young men who know that they are about to retire from the activities that accompany health, comfort, and pleasure may not seek residence in or near Greasy Creek, Ky., in the vain hope that that region holds the fountain of youth which will put them on the par with the young man of 131 summers who is just at present securing so much free advertising. It may be well for those who expect to move to Kentucky to get their bids in early, for there is bound to be a rush such as occurs when a new gold mine is discovered.

"THE CHURCH OF THE FIRST BORN" is another aspirant for honors in fighting medicine and surgery. The members of the creed do not believe in medicine and do not believe in physicians. Just what other beliefs the members of the creed have seems to be somewhat shrouded in mystery, but the Indianapolis humane officer has found it necessary to furnish medical attention to six little kiddies who were paying the penalty for the ignorance and inconsistency of their parents who claim membership in the new order. From Huntington we hear that two children suffering from scarlet fever were denied medical attention—one of the children dying from the disease—while the parents relied on a sort of a religious anointing to effect a cure of the disease. As a matter of fact grown people who have escaped the "bughouse" should be permitted to treat their infirmities by any sort of tonmyrot that appeals to their diseased brains, but there should be a heavy penalty for subjecting innocent children to neglect and maltreatment of any kind.

OF special interest and importance to former service men is a new and very liberal ruling concerning the reinstatement of War Risk Insurance which provides that such insurance, regardless of how long it may have been lapsed or canceled, and regardless of how long the former service men may have been discharged, may be reinstated any time before July 1, 1920. The only conditions are: (1) Two monthly premiums on the amount of insurance to be reinstated must accompany the application; (2) the applicant must be in as good health as at the

date of discharge or at the expiration of the grace period, whichever is the later date, and so state in the application. War Risk Insurance may be converted into United States Government Life Insurance now or at any time within five years after the formal termination of the war by proclamation of the President. United States Government (converted) Life Insurance, including Ordinary Life, Twenty Payment Life, Thirty Payment Life, Twenty Year Endowment, Thirty Year Endowment, and Endowment at Age 62, may now be paid in a lump sum at death if such method of payment is designated by the insured.

WE started out with flying colors to secure data which would enable us to publish a record of Indiana doctors in the late war, but we frankly admit that there is a strong probability that we shall end up in accomplishing nothing. We went to considerable trouble and expense to mail out letters asking for the required information, the county medical secretaries being asked to assist us in securing the information. Up to date not 25 per cent. of the county medical society secretaries have responded to the request that has been made, and several of those who have made responses frankly admit that the reports are not complete and that it is impossible to secure information from some of the doctors who served in the late war and to whom we look for the correct data. It is a little discouraging to note the apathy that exists, but perhaps it is no more than can be expected, for if doctors will not pay their taxes, medical society dues, and will not attend medical society meetings they cannot be expected to take up such a prosaic job as furnishing a little information that means little in return. However, we are still hoping that eventually every county medical society secretary will file his report with us so that we can publish some kind of a record of Indiana doctors in the late war.

AGAIN the "League of Medical Freedom" is heard from! Martin Wade, president of the Jefferson County (Ind.) Society of Medical Freedom, recently filed an injunction suit in which he seeks to restrain the school board, school superintendent, teachers, and several local physicians of Madison from conducting physical examinations in the public schools. The case is to be heard at the January term of the Jefferson Circuit Court and we shall be interested in hearing the outcome. It will be strange indeed if any court possessing the

slightest degree of intelligence will ally itself with a lot of ignorant pretenders and medical bolshevists who care nothing for the advancement of public health and sanitation, or the protection of human life. The League of Medical Freedom represents the most vicious and dangerous element opposed to medical and scientific progress and, very naturally, its selfish purposes have in mind the lowering of legal standards and regulations pertaining to the practice of the healing art. If our courts are going to lend sympathy to the cause of the organization known as the League of Medical Freedom, then it is time for us to think of closing our institutions of learning, our churches, and every other institution that is for the advancement of civilization.

SOME of the doctors will sleep in the parks or in the city jail while attending the American Medical Association session at New Orleans this year unless they have been fortunate enough to engage hotel accommodations long in advance. Of course, it is warm in New Orleans about the first of May and a snooze in the park might not be altogether disagreeable, yet it would be a little unfortunate not to have a covering if it happens to rain. Things move a little slow in the South, as we happen to know after an experience in waiting eight weeks for answers to letters—with stamps enclosed for reply—asking for hotel accommodations during the American Medical Association session. At last we finally have learned that everything in the way of hotel accommodations has been engaged, and if we are unable to get accommodations early in January what is the poor doctor going to do who waits until the last minute to secure accommodations or even takes a chance in getting a bed to sleep in after he gets to New Orleans? Fortunately, there are many who like to take a gambler's chance, so let us hope that the lack of hotel accommodations in New Orleans will not influence attendance at this year's session of the American Medical Association, though our sympathy goes out to the fellow who fails to find accommodations in this period of crowded conditions everywhere.

OF late much has been said concerning the disappearance of the "country doctor," in view of the tendency on the part of doctors in rural communities to migrate to the cities. It is said that the automobile has placed the rural communities in touch with nearby towns and cities so that no longer is it necessary for the medical

men to have their homes in the villages and hamlets. While the advantages of town life may offer an inducement to the doctor seeking a location yet it must be remembered that the country villages and hamlets offer an opportunity for better remuneration and the acquiring of a competency, inasmuch as there is less competition to contend with and the sum total of the cost of living is less than it is in town or city. We know that we are perfectly safe in saying that there are few so-called country doctors who exercise anything like good business ability in making collections and prudence in expenditures who have not in the course of a few years succeeded in acquiring quite a comfortable "nest-egg," whereas a notable percentage of doctors in towns and cities are barely making a living. Oftentimes this failure to succeed in towns and cities is due to competition, though in a still greater measure it is due to the difficulties in extending acquaintance and becoming known as a competent practitioner. The young man who is wholly dependent on his earnings will be foolish indeed if he looks slightly on country practice, and, furthermore, it is possible for him to make an enviable name for himself there if he puts forth the proper effort.

NOWADAYS the plumber is paid more for repairing a small leak in the plumbing than a doctor is paid for carrying a patient through a siege of pneumonia. Likewise, ignorant foreign girls who have not even served an apprenticeship are earning more in some of the eastern factories than is earned in professional work by graduate trained nurses who are compelled to have at least a high school education and three years of hospital training. The college professor who has spent years of time and thousands of dollars in becoming educated to the point where he can serve as a professor in some college or university is earning about the same amount of money in the course of a year that the industrious railroad brakeman earns in half the time if he does not loaf on the job. It is very evident that in this day and age brains are about the cheapest commodity open for purchase. Is it any wonder that there is no great stampede to get into the professions? The young man may have an ambition to take up one of the professions, but if he desires to make a comfortable living he will be wise if he takes up a trade or goes in for prize fighting. He may even consider the princely income of a porter or waiter in a hotel as being worthy of consideration if he desires to secure a competence which will

provide for his wants in old age. He certainly can look forward to nothing but the plainest of living, and sometimes not that, if he chooses to take up a profession. A college professor may become president of the United States—it has happened—but why hold that up as an incentive for aspiring youth. The comforts of life beckon the young man who steers clear of the professions. It is a sordid way of looking at the question of choosing a vocation, but the tendency of the times makes a virtue of necessity.

IN Indiana, and perhaps in other states of the Union, there has been considerable discussion as to the nature of the malady which by some has been called influenza, by others has been called old-fashioned grip, and by still others has been called catarrhal fever, and which has raged throughout the country, sparing few if any families. It is quite true that the death rate has been much less than it was a year ago, and pulmonary complications, especially the fatal type, have been less frequently seen, but the fact remains that if attending physicians have taken the trouble to bacteriologically examine the secretions from these epidemic cases, in almost every instance the predominating organism has been found to be the influenza bacillus. Therefore, it seems absurd to quibble over nomenclature or classification, no matter how mild or severe the malady may have been. There have been varied manifestations, and there have been some bizarre sequelae, but back of all has been, as a direct causative factor, the influenza bacillus as the predominating organism in practically all of the cases. It is quite possible—in fact highly probable—that another season will see few if any cases like we have been seeing this year and last, for the wide-spread prevalence of influenza undoubtedly has established an immunity that will go far toward preventing any recurrence of the disease in anything like an epidemic form. The outstanding fact remains that in a study of any given disease we should analyze more critically the manifestations, and put forth a greater effort to identify the organism which is at the bottom of the trouble. Altogether too many doctors are inclined to make snap diagnoses, and while a man may be a perfect wizard in correctly diagnosing troubles from clinical manifestations, yet the average physician will serve himself and his patient better if he adds the laboratory findings to the clinical findings in arriving at conclusions.

THE American Federation of Labor now declares for the first time in its history that it will take a hand in politics. This sounds like a joke in view of what has been done to us in the way of labor legislation and what is promised for the future. We have no objections to the raising of wages for any class of laboring men, but we feel unalterably opposed to the dictatorial and coercive methods adopted by labor organizations in order to secure objects they have in view which—as one labor leader expressed it—means half-time work for full-time pay. What we need in this country is a recognition on the part of labor that every working person, whether engaged in a profession or a trade, owes something to the public as well as himself, and above everything else, that in the long run it does not pay to be tricky or dishonest. Furthermore, half-time work is a menace to the morals of our people. Everyone is happiest when working within reason, and the man who works only three days in the week not only gets to be a drone, but becomes dissatisfied with himself and everyone else. Furthermore, the question of receiving full-time pay for half-time work is tinctured with downright dishonesty. We might as well legalize short weight as a means of enriching our groceryman, and accept with good grace the counterfeit dollar. If a man's time is worth \$1 or \$10 an hour, then he should receive what his services are worth; but, on the other hand, he should be compelled to give a full hour of honest service for every hour's pay received. He also should be free from the dictatorship of the walking delegate who virtually compels a slowing up or a "loafing on the job" in order to make things easy for the working men. We have no quarrel with the industrial worker who demands and should have wages which insure a decent living. Our complaint covers the false, dishonest, and dictatorial attitude assumed by the majority of the labor leaders in their attempts to secure that which they have not earned, and in their efforts to accomplish the desired result, they threaten to upset all laws and regulations governing right and justice.

THANK GOD, the railroads have been returned to their owners and we hope we are rid of the incompetency, inefficiency, and extravagance occasioned by government ownership. The American people are long suffering, and recently they have tolerated the rankest kind of mismanagement of public affairs and criminal wastefulness in the expenditure of public funds raised by burdensome taxation on the people, and been asked to swallow it all gracefully because we

helped in the war. We care not what a man's politics may be in the conduct of a public office, as long as he exhibits honesty and efficiency, but whatever his politics may be he deserves to be driven from office when he exhibits no evidence of ability to care capably for the duties of his position. The knowledge we now have of a shameful wastefulness of public funds, and a general record of incompetency and inefficiency of public officials is enough to make Bolsheviks of many people, and such would be the case were it not for the knowledge that there is a chance to correct things by the use of the ballot. Let us hope that every man and woman who has the privilege of the ballot will use it to good advantage during this year.

A COMMITTEE of the Illinois State Medical Society condemns the attitude of the Council on Health and Public Instruction of the American Medical Association concerning its attitude on the subject of compulsory health insurance, and finds fault with Dr. I. M. Rubinow, an avowed advocate of compulsory health insurance for over fifteen years and sponsor for the pamphlets that are being sent out. The committee says that "as scientific documents these pamphlets fail to even mention the fact that there may be some very real reason why, aside from the poverty of insurable risks, sickness insurance has always remained a weak sister in the insurance family. Also there are some real reasons why the great majority of the medical profession of this country are convinced that compulsory health insurance is a social 'gold brick' of a very dangerous type." The committee thinks that if the researches of the Council on Health and Public Instruction of the American Medical Association have not yet led to the discovery of these shortcomings it might be well for them to investigate this phase of the question.

THE state of New York is discussing the question of adopting compulsory health insurance, and the subject is apt to come up for decision at the next session of the New York legislature. Apparently the medical profession is opposed to the scheme, and a committee of the Medical Society of the State of New York, after investigating the subject, has reported as follows:

1. There is no necessity for the institution of a scheme covering the major portion of the population of the state providing for the institution of contract medical practice on a colossal scale in order to furnish medical attendance and other services.

2. In those countries where this scheme has been in operation for many years, it has caused a deterioration in medical morale and medical service and that its effect in this state would be the same, that is, a lessening in the quality of medical service.

3. In comparison with those countries where this scheme has been in operation the United States shows a more marked reduction in mortality rate, both general and as affecting material and infantile mortality rate. Apparently the morbidity rate under the scheme has doubled instead of being diminished in Germany and Austria since the institution of the social insurance plan.

4. There is danger of the scheme gradually undermining the functions so extremely valuable to the community at present subserved by the State Department of Health.

5. Owing to the paucity of accurate and unimpeachable data collected by means of an unbiased investigation, your committee recommends that the legislature of 1920 be requested to appropriate a sufficient sum of money for the use of the health department and such other departments in association with it, as it requires, for the purpose of making a survey of the state of New York to determine the amount and character of illness in its economical relation to the commonwealth.

6. If additional legislation is to be enacted, it should provide for a greater development of existing agencies for preventive medicine, together with the extension on a large scale of the present county and municipal functions for both preventive and remedial medicine, and it should make further provision for the inauguration of more widely extended utilization of the present institutional clinical facilities for the diagnosis and treatment of disease, in order to facilitate the access of the entire population of the state to modern methods in the practice of medicine.

Your committee, therefore, recommends that the House of Delegates, and, through them, the Medical Society of the State of New York, unqualifiedly oppose the enactment of any law instituting a system of compulsory insurance against sickness because of its menace to the public health of the state.

DEATHS

MARGARET W. GAYLORD, wife of Dr. H. G. Gaylord, Indianapolis, died February 7.

MARJORIE CLAUSER, wife of Dr. E. H. Clauser, Muncie, died February 23, at the Home Hospital, from pneumonia.

AMERICA KATHERINE HARTLEY, wife of Dr. Clarence A. Hartley, Evansville, died February 4, from cerebral hemorrhage, age 42 years.

DR. THURMAN ROSS BEAVER, aged 32, died of influenza recently, at Akron, Ohio. He graduated from the Indiana University School of Medicine in 1910.

DR. JOHN B. MCKAY of Marion; died February 14 from influenza, aged 48 years. Dr. McKay graduated from the Trinity Medical College, Toronto, Ontario, Canada, in 1904.

WARRICK BARNETT, M.D., of Stendal, Pike County, died February 7 from influenza-pneumonia; age 37 years. Dr. Barnett graduated from the University of Louisville, Medical Department, in 1911.

JEPHTHA DILLON, M.D., died February 17 at Fillmore, California; age 75 years. Dr. Dillon formerly resided at Daleville, Delaware County, Indiana, and was a member of the Delaware County Medical Society.

DR. FRANK C. HERSHEY died recently at his home in Carmel. Dr. Hershey graduated from the Medical College of Indiana, Indianapolis, in 1894. He was a member of the Hamilton County and the Indiana State Medical Societies.

THOMAS R. BASS, M.D., chief surgeon and physician at the Indiana State Soldiers' Home Hospital, Lafayette, died February 15, from pneumonia; age 36 years. Dr. Bass was a graduate of the University of Virginia, and received his medical degree from Indiana University School of Medicine, Indianapolis, in 1909.

LEONARD F. SCHMAUSS, M.D., Alexandria, was killed February 27 when his automobile was struck by a Big Four passenger engine. Dr. Schmauss was born in 1867, graduated from the Rush Medical College, Chicago, in 1897, and had practiced medicine and surgery for a number of years at Alexandria. Dr. Schmauss owned the Alexandria Hospital, and was a prominent member of the Madison County Medical Society, the Indiana State Medical Association, and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

J. H. OLIVER, M.D., of Indianapolis sustained a fracture of the head of the radius as the result of a fall.

DR. JEWETT V. REED and family of Indianapolis have returned from a four weeks' trip to Cuba and Florida.

DR. B. G. HENDRICKS and Mrs. Lena Yeiser, both of Kendallville, were married at Kalamazoo, Mich., January 27.

DR. J. H. NILES of Seymour has been appointed examiner for the United States Public Health Service in Jackson County.

DR. A. E. MORGAN, physician at the Indiana State Soldiers' Home, will go to Marion to become hospital physician at the National Home there.

ST. ELIZABETH HOSPITAL of Lafayette is to be enlarged in the near future. A new wing 170 feet long will be built as an addition to the present structure.

DR. W. E. HASTINGS, located at Mechanicsburg for the past two years, sold his practice to Dr. R. N. Sileatrau of Owensburg, Ky., and retired on February 21.

DR. V. H. MARCHAND of Haubstadt has been suffering from a broken arm. The injury was received on January 13 when the car he was driving skidded and overturned.

DR. J. M. T. FINNEY, professor of clinical surgery at the Johns Hopkins University, has declined the professorship of surgery offered him by Harvard University.

SIXTY-TWO American Red Cross nurses are now on duty in Serbia and Albania to battle against a recurrence of the typhus epidemic which swept across the Balkans last year.

LIEUT.-COL. FRANK HUTCHINS, M. C., U. S. Army, formerly of Indianapolis, has been appointed neuropsychiatrist in charge of the Walter Reed Hospital, Washington, D. C.

DR. EDWIN WALKER of Evansville, who underwent a serious operation last summer, has been slowly improving and at the present time is reported able to sit up a part of each day.

DR. W. A. HOLLIS has returned to his home in Hartford City after an extended trip through the lower Rio Grande region, where he was investigating land propositions being made to settlers.

At a special meeting of the board of commissioners, February 10, Dr. E. C. Loehr was appointed health officer for Hamilton County to fill the unexpired term of Dr. Frank Hershey, deceased.

DR. F. J. SCHULTZ, for thirteen years company physician of the General Electric Company, Fort Wayne, has resigned to take up further study of medicine in the University of Michigan.

DR. H. M. PELL, county coroner for Clay County, received the appointment as physician for the Pennsylvania Railroad Company, Monday, January 26. He succeeds the late Dr. L. L. Williams.

THE thirtieth anniversary of the founding of the Abbott Laboratories is being celebrated this month. One of the features of the celebration is the placing of their employes on a profit sharing basis.

DR. H. W. McKANE of Indianapolis has been appointed director of the division of tuberculosis, one of the new divisions of the state board of health, created by the state legislature at the last session.

DRS. C. H. McCULLY, FRED TERFLINGER AND H. H. HOLMES, all of Indianapolis, have been appointed by the War Department as examining physicians for all former soldiers, sailors and marines, for the local district.

DR. J. W. RICKETS of Indianapolis, formerly with the A. E. F. at Base Hospital No. 32,

France, has returned to Indianapolis and will resume practice. He will be associated with Dr. A. B. Graham in gastro-intestinal practice.

GEORGE S. BOND, M.D., assistant professor of medicine in the Indiana University School of Medicine, is recovering from a severe illness initiated by lobar pneumonia and complicated by pleurisy with effusion and parotid abscess.

THE latest figures from the War Department show that 222 Red Cross nurses have received decorations or citations from the United States and various foreign governments for pluck and high professional skill demonstrated in the late war.

ECONOMY is to have a resident doctor. Dr. L. W. Roller of North Manchester will move there. Economy has been without a doctor since the war began, as the resident doctor enlisted in the service and when discharged, moved to a larger field.

DR. PATRICK H. WEEKS, formerly of Indiana, late of Warren, Pa., went to Michigan City, January 28, to take the position of physician at the state prison. Dr. Weeks takes the place of Dr. J. H. Foster, who was acting under temporary appointment.

MISS MAUDE EMILY TYNER of Indianapolis, a trained nurse, and Dr. Albert Dale Huffman of South Bend, both former residents of Shelbyville, were married Saturday, February 14, in Indianapolis. Dr. and Mrs. Huffman will make their home at South Bend.

ELMER ERNEST SOUTHIARD, M.D., of Cambridge, Mass., chairman of the Section on Nervous and Mental Diseases of the American Medical Association, died in New York City, February 9, after a two days' illness from pneumonia. He was 43 years of age.

THE Wells County Medical Society met with Dr. G. Morris of Bluffton on February 3, and heard a paper on the subject, "Extra Uterine Pregnancy," by Dr. Brickley. The attendance was small owing to the fact that physicians are busy taking care of flu patients.

DR. BURTON D. MYERS, head of the medical department Indiana University School of Medicine, Bloomington, has returned from New York City, where he attended the third convention of the Society for Mental Hygiene held under the auspices of the national committee for mental hygiene.

SIR THOMAS FRAZER, M.D., F.R.S., emeritus professor of materia medica and clinical medicine in the University of Edinburgh, one of the most distinguished investigators of his time, who did much in laying the foundations of modern pharmacology and therapeutics, died recently in London, aged 79.

PHYSICIANS of Shelby County have formed an organization to be known as the Shelby Hospital Association, through which it is hoped a county hospital may be secured. Articles of incorporation have been filed with the Secretary of State. A board of seven governors has been named for the first year.

DR. KATHERINE L. STORM of Philadelphia is announcing the removal of her offices from 1541 to 1701 Diamond Street, Philadelphia. The new building which Dr. Storm has purchased has treble the capacity of her former building, and is being equipped with every facility for quick and exact work.

DR. M. F. PARRISH, who has been practicing in Monroe for the past twenty-three years, will locate in Decatur and open his office in September. Dr. Parrish will leave the first of April for Chicago to enter the Chicago Post-Graduate School of Medicine and from there he will enter the Mayo Brothers' Clinic.

DR. PAUL E. BOWERS, former prison physician at Michigan City, has resigned as superintendent of the Northern Indiana Hospital for the Insane at Logansport. Dr. Bowers is returning to California to become head of a military hospital. Dr. Bowers' successor at Logansport has not as yet been appointed.

REPRESENTATIVES of the Lake County Medical Society and the Lake County Antituberculosis Association are collaborating with the board of county commissioners in preparing plans for the proposed new county tuberculosis sanatorium, which will be built this year on a site of 73 acres of land 1 mile north of Crown Point.

AT a meeting of the Clinton County Medical Society on February 5 at the Elite Cafe in Frankfort, a committee was appointed to cooperate in any way possible with the recently appointed school nurse. The doctors will endeavor to assist in the school nurse project through the holding of clinics and in the matter of school inspection.

THE contract for the new Wabash County Hospital was let on January 24. The exact location of the hospital has not been decided on and will not be until spring. The present hospital site was sold by the county commissioners on February 25, but the county will retain the ground and the title until the new hospital is completed and ready to be accepted.

MISS HELEN SCOTT HAY of Savanah, Ill., has been appointed chief nurse of the American Red Cross Commission to Europe to succeed Miss Alice Fitzgerald, now chief of the Division of Nursing, League of Red Cross Societies, Geneva. Her work will include supervision of all Red Cross nursing activities in Poland, Czecho-Slovakia, the Balkans and France.

AT a meeting of the New York City Board of Health on December 31, a resolution was passed making wood alcohol poisoning a reportable disease. From now on it will be the duty of every hospital, dispensary, institution, and doctor in New York to report the name, age, and address of every person found to be afflicted with wood alcohol or wood naphtha poisoning.

THE next examination of the American Board for Ophthalmic Examinations will be held in New Orleans, April 26. All applications and necessary credentials of candidates desiring to take the examination should be in the hands of the secretary, Dr. William H. Wilder, 25 East Washington Street, Chicago, at least sixty days before the time set for the examination.

THE Carnegie Corporation of New York has announced its intention to give \$5,000,000 for the use of the National Academy of Science, and the National Research Council. Part of the donation will be used to erect in Washington a suitable home for the two beneficiary organizations, and the remainder placed in the hands of the academy to be used as a permanent endowment for the council.

PLANS are under way for the erection in Crawfordsville of a memorial hospital to the memory of the men of Montgomery County who died in the world war. Byron Cox Post of the American Legion, together with other patriotic and business organizations of the city, are behind the movement, and it is understood a complete hospital, adequate for the needs of the entire county, will be erected.

ACCORDING to the Federal Board for Vocational Training the status of those who were disabled in the world war is as follows: In tuberculosis sanatoriums, 46,000; in hospitals for treatment, 18,000; in asylums, 19,000; taking vocational training, 27,912, and 5,000 refused government training, making a total of 115,000. In addition there are about 200,000 men who are only slightly disabled.

MRS. H. B. SMITH of Hartford City announced the gift of three city blocks of land and \$5,000 for improvements on it, to be used as a site for a proposed county hospital. The county voted March 9 on the question of whether it will erect a county hospital in Hartford City. A large number of contributions have been made and various individuals and lodges are planning to equip rooms in it.

THE Society of American Bacteriologists of Indianapolis filed articles of incorporation with the Secretary of State on February 22. The new organization is the Indiana division of the national society of bacteriologists. Dr. Virgil Moon of the Indiana University School of Medicine is president of the Indiana organization. The directors are Samuel C. Prescott, John W. M. Bunker and Dr. A. Parker Hitchens.

DR. J. N. HURTY, secretary of the state board of health, left February 21 for Florida for an extended vacation. Dr. Hurty will address a number of medical associations and conferences in the South. Dr. Hurty has also been invited to act as vice president of the Congress of the Royal Institute of Public Health of England, which will meet at Brussels, Belgium, May 20 to 24, and has been asked to name delegates from the state board of health at the congress.

MISS MABEL KANTZ, aged 39, day supervisor of nurses at the City Hospital, Indianapolis, died of pneumonia February 21, at the hospital. Miss Kantz had been at the hospital as supervisor for about four months. She was born in

Tippecanoe County and was educated for the nursing profession at the Home Hospital training school at Lafayette. During the war she served as a Red Cross nurse at Fox Hall, Staten Island, N. Y., where she remained for thirteen months.

DURING February the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Nonproprietary articles: Eucatropine; Phenacaine.

Gilliland Laboratories: Gonococcus Vaccine (Polyvalent) (Gilliland); Staphylococcus Vaccine (Albus and Aureus) (Gilliland).

Werner Drug and Chemical Company: Eucatropine-Werner; Phenacaine-Werner.

DR. R. B. H. GRADWOHL, the announcement of whose St. Louis Biological Laboratories has appeared in the columns of this JOURNAL, has opened a Chicago laboratory, and has taken a suite of rooms in the Chicago Savings Bank Building, corner Madison and State Streets, Chicago, Ill. This laboratory is supplied with the very latest and best equipment for rendering efficient service. Dr. Gradwohl's announcement with complete information as to his Chicago office, appears on another page of this issue.

MISS ANNABELLE PETERSON of Indianapolis has been appointed supervisor of Red Cross nurses in the field of Indiana. She will assist Miss Ina Gaskill, assistant director of Red Cross Nursing Service for the state, in carrying out the Red Cross Nursing Department's peace time program. This includes the placement of authorized Red Cross nurses in public health service and the appointment of Red Cross nurse-instructors for classes in Home Hygiene and Care of the Sick and Dietetics.

DR. J. N. HURTY, secretary of the state board of health, is preparing the advertising and educational literature to be used in the campaign of the tuberculosis division of the board. A division called the "traveling division," composed of two trained nurses, the director of the division, and a chauffeur, will travel in an automobile and will stop at various county seats where lectures will be given, the sick visited and literature distributed. The trip is not for the relief of the sick Dr. Hurty said, but is purely educational.

A NEW ruling which will have an important effect has just been announced by Dr. M. S. Canfield, treasurer of the Indiana State Board of Medical Registration and Examination. Hereafter, service in the army, navy or marine medical corps may be accepted as time credits for students who wish to take the examination to practice in the state. In adopting the resolution the board expressed itself as believing active service during the war was equivalent to the two years in college, which has heretofore been required of students.

THE birth rate in France, as shown in a recent report submitted by the American Red Cross headquarters at Lille, has shrunk from nearly 4,900 in 1913 to only 600 in 1918, indicating a total loss of 15,000 births during the war. A survey of all public and private schools since the armistice indicated that 60 per cent. of the school population showed signs of arrested development, while about 40 per cent. gave evidence of ganglionic or pulmonary tuberculosis. In one typical school, out of 210 children examined, only one was in normal health.

ACCORDING to report of the American Red Cross the profession of nursing is practically unknown in Europe outside of the Catholic sisterhoods. The fact that America and England have gone so far ahead of continental Europe in this respect is attributed to the greater freedom of women in English-speaking countries. However, since the war and since Europe has had a practical demonstration of what American and English trained nurses have done and are doing, training schools are being opened and hundreds of volunteers instructed.

OUTSIDE of duties incident to the recent war, statistics show that the American Red Cross rendered aid in thirty-nine major disasters in the United States during 1919. The report shows an expenditure of approximately \$421,000 in relieving the distress of the victims, which included a total of 650 deaths, 1,800 injured and about 50,000 made homeless. Of these 39 disasters there were 7 tornadoes, 2 severe storms, 2 earthquakes, 6 floods, 10 fires and explosions, 3 mine disasters, 2 race riots, 1 motor accident and the drought in Montana.

THE Indiana Tuberculosis Association, in its closing session February 4 at the Claypool Hotel, chose Dr. Gardner C. Johnson of Evansville as president for the coming year. Dr. Alfred Henry of Indianapolis was elected vice

president; Mrs. Ella B. Kehrer of Anderson, recording secretary, and James W. Lilly of Indianapolis, treasurer. After the election of officers Miss Grace Osborn, assistant national crusade director, of New York, spoke on "The Modern Health Crusade"; James Rodgers of Logansport told "Why Business Men Should Be Interested in Tuberculosis Activities and How to Interest Them"; the state veterinarian, L. E. Northrup, spoke on "Tuberculosis in Cattle."

FRIENDS and colleagues of Dr. William H. Welch, Professor of Pathology, Johns Hopkins University, Medical Department, are planning in a most fitting way to celebrate the seventieth birthday of this beloved physician and teacher by publishing in three volumes the papers and addresses which have come from his pen. The volumes will be issued by the Johns Hopkins Press under the editorial supervision of a special committee; and the set of three, bound in linen, is offered to subscribers at \$16.50. Each copy will be numbered and assigned in the order of subscription. The edition is to be restricted to the number subscribed. Subscriptions should be sent immediately to the Johns Hopkins Press, Baltimore, Md.

THE St. Louis board of education is carrying the schoolroom to the hospital bedside for crippled children. Heretofore when children were kept away from their studies through injury or illness, it meant that they dropped back in their classes, especially when the absence was prolonged. Recently the school board with the cooperation of the superintendent of the City Hospital at St. Louis has provided teachers to go to the hospital where the children are confined and give daily lessons that will keep them up with their classes until they are able to attend school again.

THE annual report of the Indianapolis Free Tuberculosis Clinic shows clearly that more antituberculosis facilities are needed in that city. In the report it was recommended that a preventorium or convalescent hospital be established for women and children of Indianapolis; that a fresh air school of open-window school rooms be established in every district of the city; that more nurses be provided to visit and keep under supervision all cases of tuberculosis reported to the board of health; that branch clinics be established in the outlying districts of the city; that a night clinic be established to be in operation at least two nights a week; that more hospital beds be provided for tuberculous persons, especially for colored persons.

THE American Red Cross was represented at the first meeting of the General Council, League of Red Cross Societies at Geneva, by the following delegates: Willoughby G. Walling, Chicago, vice chairman of the Central Committee of the American Red Cross; Ottis H. Cutler, New York, former manager of the Insular and Foreign Division; Mrs. William K. Draper, New York, vice chairman of the New York County Chapter and formerly chairman of the Women's Advisory Committee; Samuel Mather, Cleveland, former member of the Central Committee, and Eliot Wadsworth, Boston, member of the Central Committee. Henry P. Davison, formerly chairman of the War Council of the American Red Cross and now chairman of the Board of Governors of the World League, accompanied the delegates. The meeting opened on March 2 and was of one week's duration.

THE organization of the Medical Veterans of the World War has sent out the following letter relative to the aims and purposes of the society:

To all physicians who served the Federal Government during the war:

An association of Medical Veterans of the World War was organized at Atlantic City, in June, 1919, at the time of the meeting of the American Medical Association, and a constitution and by-laws adopted. About 2,800 physicians have already joined, and all others who are eligible are invited to join the society.

The Constitution states that "The Dominant Purpose of This Association Shall Be Patriotic Service. The objects of this association shall be: To prepare and preserve historical data concerning the medical history of the war; to cement the bonds of friendship formed in the service; to perpetuate the memory of our medical comrades who made the supreme sacrifice in this war; to provide opportunity for social intercourse and mutual improvement among its members; to do all in our power to make effective in civil life the medical lessons of the war, both for the betterment of the public health and in order that preparedness of the medical profession for possible war may be assured."

The organization of the society provides for state and local organizations wherever the members desire it, and in some states, such as Wisconsin, organization has already been effected.

It is desired by the National Association that those who are already members meet together in larger and smaller groups, at the first convenient opportunity, and effect a local organization with a chairman and secretary, and also at the next meeting of the state medical society that a place be provided on the program for the Medical Veterans.

The organization of the society is based on democratic principles, and it is hoped that the members who have already joined will take the initiative and organize their own state and local societies.

The national organization will assist by furnishing application blanks and copies of the constitution and by-laws, and, if desired, stationery.

The first things to be done after the organization of a state society is effected is to elect a councillor to the general council of the organization, to represent the state society at the next annual meeting of the Veterans at New Orleans on the first day of the meeting of the American Medical Association, April 26, 1920.

A badge or button for members of the society is being made and will soon be ready for distribution.

Yours very sincerely,

F. F. RUSSELL,
Secretary.

CORRESPONDENCE

WHY TUBERCULOUS PERSONS WITHOUT FUNDS SHOULD NOT LEAVE THEIR HOME STATES

DENVER, COLO., March 1, 1920.

Editor The Journal: It is reliably estimated that several hundred tuberculous persons without funds come to Denver every year. Practically all of them come because they have the mistaken idea that climate will cure tuberculosis.

They arrive, almost penniless, without having made any inquiries, or any provisions for their needs. Since Colorado has no state, and Denver no municipal tuberculosis sanatorium (merely a ward at the County Hospital for thirty-five very sick tuberculous residents), the care of such indigent persons is limited to a few free private sanatoria, which are continuously so overtaxed that admittance is a long and difficult matter. These sanatoria comprise: the two Jewish, which accept only a small number of Gentiles; a tent colony of men with a capacity for seventy "down-and-outers," and a small home for a dozen destitute tuberculous women.

These tuberculous poor who migrate to Denver, finding no place where they can be cared for look for light work in order to maintain themselves and often their dependent families; but the demand for such work is far in excess of the supply. Driven to any work they can get, with neither friends nor care, anxious, homesick, hopeless, they rapidly grow worse, and usually soon die. They die for lack of proper rest, food, fresh air, and medical attention, those essentials of treatment, which many of them could have had at home—or here with sufficient funds for two years' care. Without these essentials climate is of no avail. If it were, Denver would welcome these tragic health-seekers instead of urging them, for their own best chances, to stay at home.

Denver also urges that the states throughout the country plan definite programs to retain

their indigent tuberculous, giving them effective treatment in state sanatoria or in their own homes.

THE DENVER ANTI-TUBERCULOSIS SOCIETY,
221 Coronado Building, Denver, Colo.

INDIANA UNIVERSITY CENTENNIAL CELEBRATION

INDIANAPOLIS, March 6, 1920.

DR. ALBERT E. BULSON, JR., Fort Wayne, Ind.

Dear Dr. Bulson: Indiana University will hold its centennial celebration on May 5, 6 and 7. May 5 will be given over to the medical exercises at Indianapolis, and we hope that this will be a most notable gathering. The present plan is to have an afternoon session with scientific papers, and an evening session with addresses. While we cannot yet announce finally our list of speakers, yet we can promise you that they will be the most prominent of American medical men.

In connection with this meeting we hope to have an exhibit illustrating the history of medical education in Indiana. There have been twenty-seven medical schools in this state, and we hope to have an historical exhibit of each. We would therefore appreciate it if the doctors of the state who know of the existence of diplomas, group pictures of graduates, photographs of important members of the faculties or alumni body, interesting books and surgical instruments belonging to men connected with these schools, any of the teaching equipment, photographs of the buildings, etc., or anything else which would be interesting in such an historical exhibit would notify us and assist us to obtain the loan of these during the few days of the exhibit.

Every physician of the state of Indiana will be most cordially invited to attend these meetings at Indianapolis on May 5, and we hope that each one will assist in every way possible to make this a great success. There is only one medical school in the state of Indiana and that is the State Medical School. More and more it is evident that the state must be responsible for the education of the medical students who later will practice within its borders, and also for the postgraduate instruction of physicians in the state who may desire to attend such courses. We therefore invite every physician of the state to get behind the Medical School in making it second to none among the state medical schools of this country. We urge all to consider May 5 as a rallying date for a great forward movement in medical education in Indiana.

We certainly would appreciate it if through the pages of THE JOURNAL of the Indiana State Medical Association you could call attention of the doctors to this occasion and to the assistance they can be to us in arranging for the historical exhibit.

With kindest regards, I am,
Yours sincerely,
CHARLES P. EMERSON.

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County Secretary	Date
1.	Decatur, C. R. Bird.....	Feb. 1, 1920
2.	Fayette, R. H. Elliott.....	Feb. 1, 1920
3.	Franklin, E. M. Glaser.....	Feb. 1, 1920
4.	Fulton, A. E. Stinson.....	Feb. 1, 1920
5.	Jasper-Newton, O. E. Glick.....	Feb. 1, 1920
6.	Jefferson, O. A. Turner.....	Feb. 1, 1920
7.	Marshall, Harry Knott.....	Feb. 1, 1920
8.	Posey, John Ranes.....	Feb. 1, 1920
9.	Shelby, F. E. Bass.....	Feb. 1, 1920
10.	Sullivan, J. B. Maple.....	Feb. 1, 1920
11.	Union, J. D. Shonwald.....	Feb. 1, 1920
12.	Warrick, J. F. Samples.....	Feb. 1, 1920
13.	Washington, Claude B. Paynter.....	Feb. 1, 1920
14.	Wells, G. B. Morris.....	Feb. 1, 1920
15.	Whitley, H. M. Ego.....	Feb. 1, 1920
16.	Delaware-Blackford, H. D. Fair.....	March 1, 1920
17.	Grant, Nettie B. Powell.....	March 1, 1920
18.	Hancock, C. H. Bruner.....	March 1, 1920
19.	Knox, D. H. Richards.....	March 1, 1920
20.	Madison, Doris Meister.....	March 1, 1920
21.	Monroe, J. E. P. Holland.....	March 1, 1920
22.	Scott, J. P. Wilson.....	March 1, 1920
23.	White, H. B. Gable.....	March 1, 1920

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1919, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

PASTEUR ANTI-RABIC VACCINE (GILLILAND).—An anti-rabic vaccine (see New and Nonofficial Remedies, 1920, p. 272) prepared according to the method of the U. S. Public Health Service. The treatment consists of twenty-one to twenty-four doses and these are sent separately each day by special delivery. The Gilliland Laboratories, Ambler, Pa.

PNEUMOCOCCUS VACCINE IMMUNIZING (GILLILAND).—A pneumococcus vaccine (see New and Nonofficial Remedies, 1920, p. 286) containing Types I, II and III, respectively, in equal proportions. Marketed in packages of four 1 Cc. syringes and also in packages of four 1 Cc. ampules, containing 250, 500, 1,000 and 2,000 million killed pneumococci per Cc. The Gilliland Laboratories, Ambler, Pa.

STAPHYLOCOCCUS VACCINE (ALBUS AND AUREUS) (GILLILAND).—A staphylococcus vaccine (see New and Nonofficial Remedies, 1920, p. 288) containing *Staphylococcus albus* and *Staphylococcus aureus* in equal proportions. It is marketed in packages of four syringes containing, respectively, 250, 500, 1,000 and 2,000 million killed bacteria in 1 Cc.; also marketed in packages of four ampules containing, respectively, 250, 500, 1,000 and 2,000 million killed bacteria in 1 Cc. The Gilliland Laboratories, Ambler, Pa. (*Jour. A. M. A.*, Feb. 7, 1920, p. 393).

CHLOROXYL.—Cinchophen Hydrochloride.—Phenylcinchoninic Acid Hydrochloride.—The actions, uses and dosage are the same as those of cinchophen (see New and Nonofficial Remedies, 1920, p. 224, under Phenylcinchoninic Acid (Cinchophen) and Phenylcinchoninic Acid Derivatives). Chloroxyl is a yellow crystalline powder with an astringent, slightly bitter taste, insoluble in water. Chloroxyl is also supplied in the form of Chloroxyl Tablets 5 grains. Eli Lilly and Company, Indianapolis, Ind. (*Jour. A. M. A.*, Feb. 14, 1920, p. 461).

PROPAGANDA FOR REFORM

GRALE'S FRUIT LAXATIVE.—This is advertised with the claim: "Grale's Fruit Laxative contains only figs, dates, raisins and prunes, a few simple herbs and bran. No drugs at all." Though claimed to contain no drug, the A. M. A. Chemical Laboratory reports that the preparation was found to contain ground senna. Since senna is a well known drug of recognized activity, the claim that the preparation contains no drug is false (*Jour. A. M. A.*, Feb. 7, 1920, p. 410).

DIONOL.—The Glorified Petrolatum.—The exploitation of Dionol is based on the theory: (1) The brain is a generator of neuro-electricity; (2) the nerves are the conductors of this electricity; (3) the nerve sheaths are the insulators; (4) wherever there is local inflammation, the nerves are short circuited owing to a breaking down of the insulation resistance of the nerve sheaths; (5) this results in "an escape of neuro-electricity"; (6) Dionol coats the nerve sheaths with a nonconducting layer, and this restores the insulation and "stops the leak." Whether this theory was invented to give a "reason for being" for Dionol, or whether Dionol was first invented and it became necessary to evolve a theory that would give some plausibility to the claims made for this etherialized petrolatum, we are unable to say. In any case, the theory and the product are exploited together. The value of the "case reports" sent out for Dionol may be estimated from a report featured under the heading "Infected Wounds . . ." signed, "Dr. W." This "Dr." appears to be an osteopath whose specialty, according to his advertisement in his local newspaper, is "Catarrhal Deafness and Hay Fever, Acute and Chronic Diseases" (*Jour. A. M. A.*, Feb. 7, 1920, p. 410).

HYPNO-BROMIC COMPOUND.—A Vermont physician reports that Hypno-Bromic Compound, manufactured by H. K. Wampole and Company, is sold by druggists without prescription, though it contains in each ounce: cannabis indica, 1 grain; morphin, 0.25 grain; potassium bromid, 48 grains; hyoscyamus, 1 grain; chloral hydrate, 96 grains. He writes that he has three young women who have become addicts to the preparation as a result of thoughtless prescriptions from physicians. By visiting the various drug stores in town, these addicts have been able to obtain an ample supply of the preparation. Hypno-Bromic Compound is more than an unscientific mixture; it is a dangerous product that should not be sold indiscriminately over the drug counter. Physicians who prescribe such mixtures and druggists who indiscriminately sell such stuff are disgracing two honorable professions (*Jour. A. M. A.*, Feb. 7, 1920, p. 410).

EUPAD AND EUSOL.—Eupad is a powder composed of equal parts by weight of boric acid and chlorinated lime (containing 25 per cent. available chlorine). Eusol is thus made: (a) 25 gm. of eupad are shaken with 1 liter of water, allowed to stand for some hours and filtered. (2) To 1 liter of water add 12.5 gm. chlorinated lime (25 per cent. chlorine), shake vigorously, and add 12.5 gm. boric acid in powder and shake again. Allow to stand, decant and filter. If the official chlorinated lime containing 30 per cent. available chlorine is used, a proportionately smaller quantity should be sufficient (*Jour. A. M. A.*, Feb. 7, 1920, p. 413).

INFLUENZA VACCINES.—The *Medico-Military Review*, a semimonthly mimeographed publication sent to medical officers of the Army by the Surgeon-General's Office, has the following on the use of vaccines against influenza: "You are reminded that so far a comprehensive analysis of results obtained by the use of monovalent and polyvalent vaccines in the prevention of influenza has not demonstrated their value. Much carefully controlled experimental work is now being carried out on this subject both in civil institutions and in the Army, and any worthwhile advances will be reported in the *Review* from time to time. If a prospective vaccine is developed, it will be prepared at the Army Medical School for general distribution and all medical officers will be duly notified. The general use of the present commercial polyvalent protective against influenza is not considered desirable. Numerous telegrams and other requisitions are being received for influenza vaccine. In view of the fact that no prophylactic influenza vaccine is available, such requisitions should be discontinued" (*Jour. A. M. A.*, Feb. 14, 1920, p. 466).

AUTO-HEMIC SERUM.—This is an asserted cure for laziness, ugliness, frigidity and many other things. For many years L. D. Rogers, the discoverer of Auto-Hemic Serum, was the chief owner of the National Medical University of Chicago—a low grade school of the "sun-down" variety now out of existence. A few years ago, Rogers was exploiting a cancer serum and selling shares in the "Cancer Research Laboratory and Hospital." In 1915 he exploited a Japanese consumption cure. Then came Auto-Hemic Serum, exploited by means of "The National Society of Auto-Hemic Practitioners" and the "North American Journal of Homeopathy" the official organ of the "Auto-Hemic Practitioners" and of the "American Medical Union." Auto-Hemic Therapy is described as "The Missing Link in Medicine," and "consists in giving the patient a solution made by attenuating, hemolizing, incubating and potentizing a few drops of his or her own blood and administering it according to a refined technic developed by the author." The "technic" of this new therapy may be learned through a mail order course costing one hundred dollars, "cash-in-advance." One of the chief virtues claimed for the serum is that of developing in the patient who takes it an unbounded energy; it apparently makes him want to work himself to death (*Jour. A. M. A.*, Feb. 14, 1920, p. 477).

EUMICTINE.—The Council on Pharmacy and Chemistry reports that Eumictine is ineligible for New and Nonofficial Remedies because (1) it is unscientific; (2) it is sold under unwarranted therapeutic claims; (3) the name "Eumictine" is blown in the bottle for the obvious purpose of bringing the product to the attention of the public when it is prescribed in the original package, and (4) the name is therapeutically suggestive and not in any way descriptive of its composition. Eumictine is a preparation from the laboratories of Maurice Le Prince, Paris, France, and is marketed in this country by George J. Wallau, Inc., New York. According to the American agent, "each capsule is supposed to contain 20 centigrams of San-

talol, 5 centigrams of Hexamethylene-Tetramine" (*Jour. A. M. A.*, Feb. 21, 1920, p. 542).

DU PONT COTTON PROCESS ETHER.—Recently the "News Service" of the E. I. Du Pont De Nemours and Co., Inc., circularized the press of the country with a "filler" about "The New Du Pont Ether." The Du Pont Ether and the claims made for it are seemingly based on the work of one man, James H. Cotton, M.A., M.D., Toronto, Canada, who published an article on "Cotton Process Ether and Ether Analgesia." However, Cotton did not give the composition of the "new" ether, nor does his work appear to have been corroborated. In reply to an inquiry from the Secretary of the Council on Pharmacy and Chemistry, the Du Pont Chemical Works declared that the "procedure of manufacture, and the exact composition" of the ether was regarded as confidential information. The use of a therapeutic agent of unknown composition is unscientific and contrary to the best interests of the medical profession and the public, but it is many times more serious for physicians to use a secret or semi-secret substance as an anesthetic.

BARBITAL (VERONAL) ADDICTION.—The constant use of even small doses of barbital (veronal) affects the central nervous system. Those taking the drug habitually become much debilitated and seem less able to stand moderate doses. Death has occurred from a 3 gm. dose in addicts (*Jour. A. M. A.*, Feb. 21, 1920, p. 544).

ANTIPLASMA.—A nostrum called Antiplasma or Rudolph's Malarial Specific is being exploited in the South. It is claimed that the preparation was "developed by J. J. Rudolph, M.D.," and that "There is only one way to cure Malarial Fever. Take 15 drops of Rudolph's Malarial Specific on sugar or in molasses, three times daily for six days." The A. M. A. Chemical Laboratory reports that Antiplasma is a pale yellow, viscid liquid having an odor resembling a mixture of oil of turpentine and oil of wintergreen. The preparation responded to tests for rosin, turpentine and methyl salicylate. It was impossible to determine whether the product was a mixture of the three, or some natural turpentine-like product "thinned" with methyl salicylate. The chemists conclude that a mixture of 53 parts of bleached rosin, 41 parts of oil of turpentine and 6 parts of methyl salicylate would probably have whatever anti-malarial properties Antiplasma possesses (*Jour. A. M. A.*, Feb. 28, 1920, p. 618).

PHARMACY BY ACT OF CONGRESS.—For years the manufacturers of "patent medicines" have assured us that the alcohol in their nostrums was used only as a solvent, preservative or extractive agent. Thus Wine of Cardui at one time contained 20 per cent. of alcohol and the manufacturer claimed that no more was used than was needed as a solvent and preservative, and that attempts to substitute another preservative had proved futile. Then came national prohibition and now Wine of Cardui contains 10 per cent. of alcohol, and its preservative powers have been fortified by the additional of benzoates (*Jour. A. M. A.*, Feb. 28, 1920, p. 607).

BOOK REVIEWS

ROENTGEN INTERPRETATION. A Manual for Students and Practitioners. By George W. Holmes, M.D., Roentgenologist to the Massachusetts General Hospital, and Instructor in Roentgenology, Harvard Medical School; and Howard E. Ruggles, M.D., Roentgenologist to the University of California Hospital and Clinical Professor of Roentgenology,

University of California Medical School. Illustrated with 181 engravings. Philadelphia and New York: Lea and Febiger, 1918. Cloth, \$2.75.

This work is intended for those seeking a working knowledge of roentgen interpretation. Practically every active practitioner may be included in that category, therefore, this book is really intended for every active practicing physician.

In a brief and concise—yet comprehensive—form the authors present the essentials of this important subject. Obviously no detailed information can be given in such a small volume, but the many references given at the end of each chapter will enable the seeker to obtain as much detailed information as he desires.

This new book ought to be of real value and benefit to practically every active practitioner.

AMERICAN ILLUSTRATED MEDICAL DICTIONARY (DORLAND). Edited by W. A. Newman Dorland, M.D. Philadelphia and London: W. B. Saunders Company, 1919. Flexible leather, \$6.00 net; thumb index, \$6.50 net.

Those who have become familiar with the American Illustrated Medical Dictionary will welcome this new tenth edition, revised and enlarged. To those who are not familiar with the work we offer the suggestion that as a medical dictionary nothing more convenient in size, up-to-date and sufficiently comprehensive for the varied requirements of all classes of medical men has been offered. The author does not claim that the book is an encyclopedia, but it is a dictionary furnishing full definitions of the terms of medicine and kindred branches, and such collateral information as medical men generally would be likely to look for. It includes the terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Veterinary Science, Nursing, Biology and many new and elaborate tables.

This new revised edition contains 1201 pages, with 331 illustrations—119 in colors—and embraces over 2000 new terms. By using a large page and thin—but good—paper it has been possible to put an unusually large amount of matter in a volume of a handy size. The flexible leather binding and the thumb index are valuable features. We have no hesitation in recommending the book as being one of the most practical medical dictionaries published.

THE DON QUIXOTE OF PSYCHIATRY. By Victor Robinson, Ph.C., M.D. Cloth, \$2.00. Historico-Medical Press, 206 Broadway, New York, 1919.

This book has been characterized as "a chapter in the history of American medicine, containing information not elsewhere available." In a very interesting manner the author relates the medical career of S. V. Clevenger, M.D., and in doing so he brings in many of the famous medical men with whom the former came into contact. Many of the profession—especially those who have some interest in and reverence for our predecessors who have left their mark upon the progress of medicine in our own country—will gladly welcome this book and regard it very highly, indeed.

MODERN SURGERY: GENERAL AND OPERATIVE. By J. Chalmers DaCosta, M.D., Samuel D. Gross Professor of Surgery, Jefferson Medical College, Philadelphia, Pa. Eighth Edition, Revised, Enlarged and Reset. Octavo of 1697 pages, with 1177 illustrations, some of them in colors. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$8.00 net.

(Concluded on adv. page xviii)

PURITY

POTENCY

TRUSTWORTHINESS

CHARACTERIZE ALL OF

SQUIBB'S BIOLOGICALS

AS WELL AS ALL SQUIBB PHARMACEUTICALS AND CHEMICALS

PARTICULARLY WORTHY OF NOTE FOR USE AT THIS TIME OF THE YEAR ARE

TYPHOID VACCINE

TETANUS ANTITOXIN

Which always should be used early, therefore kept on hand ready for immediate use.

ANTI-MENINGITIC SERUM (Polyvalent)

Equally balanced against all types of Meningococci.

DIPHTHERIA ANTITOXIN (Globulin)

Which is small in bulk for the number of units, as is also the Squibb Tetanus Antitoxin.

THROMBOPLASTIN (Containing all cerebral haemostatic substances, including Kephalin in full amount)

For local use and use hypodermically. Causes physiological clotting without danger of Thrombosis or of Embolism.

LEUCOCYTE EXTRACT (Is a Sterile Extract of Healthy Leucocytes)

For use alone or with vaccines and serums. It increases Leucocytosis and Phagocytosis.

Full Directions with Each Package



Complete Literature on Request

E. R. SQUIBB & SONS, NEW YORK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

80 BEEKMAN STREET

A House of Service

1—Studying the Needs of Physicians

THE function of Parke, Davis & Company is to provide a service that will assist the medical profession in the treatment of disease. This service begins with a study of the medicinal needs of physicians. It embraces the investigation, manufacture and testing of therapeutic agents to meet those needs. It includes the efficient and economic distribution of medicinal products throughout the world.

Parke, Davis & Company were only twelve years old as a house when they realized the necessity of greater uniformity in therapeutic agents and gave to physicians something they had never had before—chemically standardized drug products. The importance of this service was promptly recognized. In a comparatively short time assayed medicinal agents were everywhere in demand by the medical profession.

A few years later the need of a more efficient means of treating diphtheria became a prominent subject of discussion in medical circles. In November, 1894, the International Congress of Hygiene met in Budapest. Diphtheria antitoxin was announced to the world. Parke,

Davis & Company immediately began the manufacture of this product. Biologic therapy was thus introduced to the Western Hemisphere.

The establishment of a biologic laboratory paved the way for further opportunities to meet the needs of physicians. Physiologic standardization of drug products became an established procedure. This notable contribution solved the problem of adjusting to definite standards of strength such potent drugs as ergot, digitalis, strophanthus and cannabis indica—drugs not amenable to chemical assay.

Later, medical men began to turn their attention to the use of endocrine products. Physiologic standardization made it possible to supply physicians with uniformly active glandular preparations.

There is an insistent demand today for improved methods in hypodermic medication. Parke, Davis & Company's answer to this demand is a growing list of sterilized ampoule solutions.

The business of this organization is to study the medicinal needs of the physician, and to meet those needs with efficient therapeutic agents.

PARKE, DAVIS & COMPANY

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 4

FORT WAYNE, IND., APRIL 15, 1920

PER YER, \$2.00
SINGLE COPY 25 CENTS

CONTENTS

SYMPOSIUM

	PAGE
Hour-Glass Bladder, with Report of an Operated Case. H. K. Bonn, M.D., Indianapolis.....	107
Résumé of Past Two Years' Prostatic Work. W. N. Wishard, M.D., and H. G. Hamer, Indianapolis.....	111
Renal Tuberculosis. P. E. McCown, M.D., Indianapolis..	114
Testing Kidney Function. A. C. Yoder, M.D., Goshen, Ind.	120

ORIGINAL ARTICLES

Report of Case of Epidemic Encephalitis. C. E. Gilliland. M.D., Terre Haute, Ind.....	132
A Case of Primary Pneumococcus Peritonitis. Thos. B. Noble, M.D., and Scott R. Edwards, M.D., Indianapolis	134

EDITORIALS

	PAGE
The Treatment of Diphtheria.....	135
Attention! Ex-Medical Officers.....	136
Noguchi's Discoveries in Yellow Fever.....	137
Editorial Notes	137

MISCELLANEOUS

Deaths	140
News Notes and Personals.....	140
The Truth about Medicines.....	150
Book Reviews	Adv. p. xviii

SOCIETY PROCEEDINGS

Indianapolis Medical Society.....	144
Lake County	149
Thirteenth District	149
Tippecanoe County	149

NEXT ANNUAL SESSION, SOUTH BEND, SEPT. 22, 23, 24, 1920.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS Second CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103, ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

New
(8th)
Edition

FLINT'S PHYSICAL DIAGNOSIS

New
(8th)
Edition

In every corner of the globe, wherever there is a medical man, this little work is known for its simplicity, directness, exactness and authority in dealing with physical signs in health and disease. The principles, methods, limitations and the practical conclusions of physical examination of the thoracic viscera have never been more clearly nor more effectively described in English.

In this new edition are included the more recent studies upon Effort Syndrome or Soldier's Heart, which have added so much to our knowledge of

cardiac disorders and arrhythmias. Greater emphasis has been laid upon the unusual signs that may occasionally be found over the normal heart which led in the past two years to many erroneous diagnoses of organic valvular disease. More attention is given to Pericarditis while Bronchopneumonia, particularly the confluent forms which complicated the Influenzal Epidemic, has been brought into greater prominence—also the diagnosis of Pulmonary Tuberculosis on uncertain and insufficient evidence—a cause of countless errors both in the French Army and in our own—has been most carefully considered.

CONTENTS

The Physical Basis of Auscultation and Percussion of the Lungs—Anatomical, Physiological and Pathological Principles Involved in Percussion and Auscultation—Percussion in Health—Percussion in Disease—Auscultation in Health—Auscultation in Disease—The Physical Diagnosis of Diseases of the Respiratory Organs—The Physical Conditions of the Heart in Health and Disease. The Heart Sounds and Cardiac Murmurs—The Physical Diagnosis of Diseases of the Heart and of Thoracic Aneurism—Examination of the Abdomen—Order of Physical Examination.

By AUSTIN FLINT, M.D., Late Professor of the Principles and Practice of Medicine, Bellevue Hospital Medical College. Revised by HENRY C. THACHER, M.D., College of Physicians and Surgeons; Assistant Attending Physician, Roosevelt and Lincoln Hospitals, New York. 12 mo, 362 pages, illustrated. Cloth, \$3.00 net.

PHILADELPHIA
706-710 Sansom Street

LEA & FEBIGER

NEW YORK
2 West 45th Street

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, South Bend, September 22, 23 and 24, 1920

OFFICERS AND COMMITTEES FOR 1920

President	CHARLES H. McCULLY, Logansport	3d Vice President.....	CHARLES STOLTZ, South Bend
1st Vice President	BUDD VAN SWERINGEN, Fort Wayne	Secretary-Treasurer.....	CHAS. N. COMBS, Terre Haute
2d Vice President.....	SAMUEL HOLLIS, Hartford City, Ind.		

SECTION OFFICERS

Surgical Section—Chairman, James Y. Welborn, Evansville; Vice Chairman, M. R. Combs, Terre Haute; Secretary, H. O. Shafer, Rochester.

Medical Section—Chairman, Charles P. Emerson, Indianapolis; Vice Chairman, B. S. Hunt, Winchester; Secretary, Jane Ketcham, Indianapolis.

Eye, Ear, Nose and Throat Section—Chairman, John R. Newcomb, Indianapolis; Secretary, E. M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1920), Joseph Rilus Eastman, Indianapolis. Alternate, Miles F. Porter, Fort Wayne.
For two years (term expires December 31, 1921), Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington.

COUNCILORS

CHAIRMAN, G. W. H. KEMPER, MUNCIE.			
DISTRICT	TERM EXPIRES	DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920	7th—T. B. Eastman, Indianapolis.....	December 31, 1920
2d—J. B. Maple, Sullivan	December 31, 1921	8th—G. W. H. Kemper, Muncie.....	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922	9th—William R. Moffitt, Lafayette.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920	10th—E. M. Shanklin, Hammond.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921	11th—G. G. Eckhart, Marion.....	December 31, 1921
6th—T. S. Spilman, Connersville.....	December 31, 1922	12th—E. E. Morgan, Fort Wayne.....	December 31, 1922
		13th—H. M. Miller, South Bend.....	December 31, 1920

(See list of committees on page iv)

Hygeia Hospital service offers a medication of definite therapeutic value in the correction of narcotism and alcoholism. Hyoscine or scopolamine are not used in treating the drug habit. Separating the user from the drug is not a treatment—craving must be destroyed.

WM. K. McLAUGHLIN, M. D., Supt.

Office: STATE-LAKE BLDG.

Suite 702-704

CHICAGO, ILL.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., APRIL 15, 1920

NUMBER 4

SYMPOSIUM

HOOR-GLASS BLADDER

WITH REPORT OF AN OPERATED CASE *

H. K. BONN, M.D., F.A.C.S.
INDIANAPOLIS

A brief history of this case of hour-glass bladder is as follows:

A male, aged 60, married, was referred to me as a case of prostatic hypertrophy. There did not appear to be anything of note in the past personal history at the time it was taken, beyond pulmonary phthisis forty years ago with apparent recovery.

The present urologic disorder only dates back five years, as nearly as the patient can remember. At this time he began to have difficulty in urinating, passing small amounts frequently, and only after considerable straining effort. A few ounces of urine would be voided, followed by a wait of perhaps five minutes, and then a few ounces would again be passed. This act would be repeated several times before relief was secured. The patient always felt that the bladder had not been completely emptied. Urine was passed at least every three hours during the day and from two to twelve times at night. Burning pain on urination was frequently present.

On Jan. 15, 1919, a large quantity of blood suddenly appeared in the urine and this hemorrhage continued for eleven days. Retention was present during this time.

I saw the patient for the first time on February 3, and there was a decidedly bloody tinge to the urine at this time.

On catheterization, there was 12 ounces of residual urine. My own analysis of this catheterized specimen showed many renal, ureter,

bladder, prostate and pus cells; likewise a moderate amount of blood. There was a large amount of albumin, but no casts.

I made a cystoscopy the next day. The prostate appeared to show a bilateral hypertrophy of considerable extent, and both lobes were easily defined. Previously a rectal examination had shown a bilateral symmetrical prostatic hypertrophy, the commissure being obliterated.

The ureters were identified with considerable difficulty, appeared fairly normal, and were not catheterized, since all evidence pointed to prostatic obstruction. The medium in the bladder constantly was beclouded, and so I was unable to satisfactorily observe the area adjacent to the ureteral mouths.

Areas of acute and subacute cystitis were found in the bladder at various sites, but no definite bleeding point could be found.

The preceding constitute the sole findings of the first cystoscopy.

There was a severe depression following the cystoscopy, but with careful diet, forced water, and hygienic measures, the patient gradually recovered and gained considerable ground in addition. Retention had been present after the cystoscopy, and thereafter vesical irrigation was done after each catheterization, through the catheter.

Two weeks after the cystoscopy, I opened the bladder through a suprapubic incision, under local anesthesia. The bladder wall was about 1 or 1.5 cm. thick, and it was observed that the peritoneal reflexion was unusually adherent to the bladder, and very difficult to reflect.

On introducing a finger into the bladder, I found a cavity, capable of holding about 20 ounces of fluid, with smooth walls, but no evidence of carcinoma, other tumor, or stone.

On following the anterior bladder wall forward and downward with my finger, I was very much surprised to have the finger slip into a ring-like opening. The index finger would just

* Presented before the Indianapolis Meeting of the Indiana State Medical Association, September, 1919.

barely enter this ring, which was the connecting opening between the large upper and small lower compartments of the bladder. The lower compartment had a capacity of from 6 to 8 ounces.

With the patient in the dorsal position, the opening appeared to lie in the horizontal plane of the body. The ring was at least 2 inches above the internal vesical sphincter, and the walls of the opening were continuous with the bladder walls and apparently of the same thickness. The opening was perfectly round and quite tense.

On exploration, each lobe of the prostate was found to be as large as a crabapple. The enlargement was uniform, no middle lobe was present, but the consistency was soft, a possibly significant fact in view of later findings.

The internal vesical sphincter was found greatly contracted.

With a finger underneath the ring and hugging the wall of the bladder, a shelf or septum could be felt which extended backwards for at least 2 inches before the downward curve of the bladder wall of the lower compartment could be outlined. Under like circumstances, but extending the finger anteriorly, a septum was palpated, which was at least 1 inch in length.

As the cystotomy had been made solely as a preliminary drainage procedure to improve the patient's condition, a rubber tube was passed into the bladder and through the ring for 1 inch, and the tube then anchored. The bladder, the muscles and fascia and skin were closed as usual, the bladder being anchored in contact with the overlying muscles. The tube was removed on the fifth day, the patient up in a chair on the sixth, and urine passed *via naturales* the next day.

I cystoscoped the patient through the suprapubic opening a week later, defining the ring easily. At this time, I wished particularly to determine by a cystoscopy the relations of the ureters to that part of the septum of the bladder wall extending posterior to the ring. This I was unable to do, either by way of the suprapubic fistula or the urethra.

Two weeks later a general anesthetic was given, the patient being deemed sufficiently improved to warrant further operation.

On reexamining the prostate through the opened bladder at this time, I found that the gland had decreased markedly in size, being perhaps a trifle smaller than normal. Hence, prostatectomy was deemed unnecessary, provided the ring opening could be sufficiently en-

larged by a plastic operation, to relieve the obstruction. The internal vesical sphincter was contracted and so dilatation was done with the index finger.

The patient had been given methylene blue for several days previous to the operation, as a measure to assist in locating the ureters and their relation to the posterior septum, but I was unable to locate either of the ducts.

In reviewing the surgical procedures of value in such a condition, all the usual methods of dealing with diverticula had been considered, but none appeared to exactly fit this case. The literature available was voluminous concerning diverticula but meager on hour-glass bladder, Krogus' case being the only one I found previous to operating this case.

Therefore, I determined to use two plans, in order thus: First, to attempt to separate the posterior bladder wall from the peritoneum down to the septum, beginning at the suprapubic opening, keeping one finger underneath the septum as a guide. Then, when the separation was completed, and with a finger between the bladder wall and the peritoneum at the level of the posterior septum, I expected to divide the ring and septum backwards and to resuture the shelf in a plane opposite to that of division, thus widening the opening between the two compartments of the bladder.

This plan was attempted, but because of the pericystitis present, which glued the peritoneum and bladder wall tightly together, I promptly opened the peritoneal cavity, the rent being promptly resutured.

On realizing that the previously described plan could not be accomplished without considerable shock and possibly evil consequences to the patient, I next divided the ring and anterior septum in a forward direction and resutured the tissues in the opposite plane to that of division, hoping to gain a widening of the opening.

This plan worked exceedingly well, since now four fingers could be easily introduced between the two compartments, instead of only one finger as heretofore. When the ring was incised, I particularly observed that all coats of the bladder were present at this site.

A rubber tube was introduced to almost the bottom of the bladder and the incision closed up to the tube. The tube was removed on the fifth day, and the patient voided on the tenth. However, in the four weeks spent in the hospital, he voided only four times—in fact, once each week.

After dilatation up to 30-French with the dilator, at the beginning of the fifth postoperative week, he began to void and has continued to do so. The suprapubic fistula definitely closed by the end of the ninth postoperative week.

I have considered this case to be one of congenital hour-glass bladder, although after mak-



ing a fairly comprehensive survey of the literature, I find that there are many arguments pro and con relative to the question as to whether these sacculations are congenital or acquired.

The hour-glass, or septum bladder, is commonly considered to be of the true congenital type, and is probably the result of maldevelopment. Obstruction or infection appears necessary before symptoms occur, but cases have been recorded where neither of these causative factors were present. This type of deformed bladder has thick walls separating the compartments and all coats of the bladder are present. The hour-glass bladder is located usually either laterally or at the apex (a urachus deficiency?). Rarely are they found anteriorly.

Lower considers all of these atypical bladders to be of acquired origin, while Pagenstecher and Howard consider some diverticula to be of a congenital type. Lower, after a study of twenty-three personal cases of diverticulum, concludes that: (1) Diverticula are rarely found in the very young; (2) that only about 10 per cent. of the reported cases of diverticulum occur in women; and (3) that in most cases the bladder wall is much thickened, a condition generally found when obstruction to the urinary outlet is present.

Pagenstecher offers the following as to the origin of the congenital type:

1. There exists an anteroposterior transverse partition or strangulation of the bladder. The strangulation may be above or below the ureters. This form is the congenital hour-glass bladder. Its origin is about the time of the fourth month (embryo of 17 mm.).

2. There exists also a really cleared or doubled bladder. The separation reaches at least to the apex of the trigonum. There, both either open into the urethra, particularly in the male, or the urethra is also doubled, chiefly in the female. Frequently other malformations, such as uterus bicornis and duplex, may coexist.

An early duplicature of the embryonic rudiment or the clearing of a single embryo, need not necessarily be assumed, but only a degree of the primitive embryonic rectum extended far upward and variously splitting, or a division of the embryonic material from which the latter form. This type of bladder is divided inside by a partition, consisting of two layers, each of which shows the structure of a complete bladder wall. The ureters either go only into the principal ventricle connected with the urethra, or each corresponds to one ventricle. The accessory ventricles are usually more predominant on the left side.



Since the principal evidence for the acquired theory of origin is supported on the ground of obstruction, hence the disorder is limited to males, according to Howard. To controvert this, he cites two personal cases observed in women.

Judd remarks that undoubtedly some diverticula are of congenital origin, since they have

been found in children and infants. In Judd's cases, although some of the sacculations were in the vicinity of the ureter mouths others were not. He believes, therefore, that the contention that the weak points in the bladder, the sites of embryonic buds, as a point of obstruction where the sacculation begins, can be discarded, because the relationship of the sac to the ureteral mouths is not constant. Congenital types, he considers, are those in which all bladder coats are involved, the acquired form having only a sac of mucous membrane.

Krogus considers all vesical sacculations to be of a congenital origin, and bases his premises on embryologic observations. He operated a case in which a coxcomb-like fold formed the roof of the cavity, separating the sacculation from the bladder cavity proper and the posterior urethra.

Englisch has based his differentiation between congenital and acquired diverticula on the question as to whether their walls possess muscular bands or not, those with the bands being congenital, but those without musculature being of acquired origin. He suggests that diverticula may be divided into two groups, congenital and acquired. The congenital group may be divided into (a) hour-glass bladder, the strangulation being either above or below the ureters; (b) double, split or bifid bladder. In this latter type, Thomas says the separation reaches to the apex of the trigone and both cavities open into a common urethra or a double urethra may be present. The acquired type may be divided according to their etiology into (a) intra-uterine; (b) obstacles to urination (most frequent), and (c) traumatic.

Civale and Voillemer were the first to assert that vesical sacculations have the power of contraction, but only when there are muscular fibers in the wall of the sac. They agree with Englisch as to the points determining the origin.

Bransford Lewis remarks that the walls of diverticula are supplied with so little muscle tissue that they are inert and incapable of contributing to the evacuation of the organ.

However, Buerger, while attempting to destroy, by the Oudin current, a papilloma, situated in a diverticulum, found that each time the current was applied the orifice of the sac contracted, and the papilloma disappeared from sight.

Camino, while looking at a stone, lying in a diverticulum, saw the calculus partially extruded, as if pushed from behind by some mysterious finger. Then suddenly the calculus disappeared from view. This hide-and-seek phe-

nomenon was repeated several times, but Camino was unable to seize the stone. Finally, one fine day, the patient voided his stone and ended his trouble.

In regard to the surgical treatment of the hour-glass bladder, Zachrisson, Lennander, Verhoogen and Zanjies have all followed the same plan, which I used, this procedure being merely a principle of plastic surgery.

Squier, in operating a case of this type, removed the upper portion of the bladder, after widening the opening. He makes a plea for the entire removal of small diverticula, but insists, as does Howard, that a conservative operation is best in the true hour-glass form.

In that type of hour-glass bladder presenting a small upper compartment and a large lower sac, and when such an upper sac might be considered a diverticulum, complete removal of this upper sac should be done. Here the technic of removal could be by simple dissection, or packing with gauze previous to the dissection might be of aid. Either drainage through the opening separating the upper and lower compartments could be employed, or complete closure and the retained urethral catheter could be used.

In diverticula, situated elsewhere than anteriorly and above, there are several methods available which unfortunately do not lend themselves readily in the treatment of a true hour-glass bladder.

The methods commonly used in the removal of diverticula are (1) Simple extirpation by dissection; (2) packing with gauze previous to dissection; (3) inversion of the sac by grasping the bottom with forceps, followed by dissection, and (4) Young's method, inversion by a suction tube followed by dissection and extirpation.

If I may be pardoned a digression, I would like to call attention to a method devised by my friend, W. P. Garshwiler, and as yet unpublished. A rubber bag, attached to a rubber tube, the whole being integral and similar to a Hagner bag, is introduced into the diverticulum, and then the bag is distended through the tube with either air or water, until the bag adheres to every part of the diverticulum. Traction on the clamped tube can then be made and dissection of the sac begun. By this means, firm traction on the sac can be maintained constantly without fear of rupture occurring. This method may be used first, or may be used after the other methods have been found difficult.

Judd states that where there is an obstructing enlargement of the prostate, associated with diverticulum, removal of the prostatic obstruc-

tion will not relieve the situation, but removal of the diverticulum, plus prostatectomy, will completely relieve the symptoms.

This statement has some bearing on my case, yet the great decrease in size of the prostate made me feel that with this man, who was a poor surgical risk at best, removal of the obstructing ring would result in recovery.

A recent catheterization, made for the express purpose of determining the amount of residual urine, showed that the patient was emptying his bladder completely at each urination.

Judd also has made the observation that cases of hour-glass bladder or vesical diverticula heal more slowly than ordinary bladder cases, and this comment has been found to hold true in this instance.

(Addenda: Those interested in this subject will find a complete bibliography in the papers by R. C. Bryan, in the *American Journal of Urology*, for February, 1913; and of Krogus in the *Urologic and Cutaneous Review*, for November, 1917; and of Ricketts in the *Urologic and Cutaneous Review*, for March, 1919.)

SUPPLEMENTARY NOTE

The purpose of this note is to detail briefly additional information concerning the case of hour-glass bladder above reported, which has been secured since the original paper was read. This information was secured in November, 1919, when the patient presented himself, by request, for further observation.

Blood and spinal fluid Wassermann tests, done by Dr. Bernhard Erdman, were negative and the cell count was normal.

Cystoscopy showed the original ring-like opening connecting the two bladders to be of apparently the same size as before operation. This fact was a disappointment when first noted, since I naturally concluded that the ring had again contracted. This was found to be erroneous, as evidenced by the cystograms.

No pathologic changes were noted in the bladder proper. The bladder capacity was 645 c.c.

The bladder was filled with 20 per cent. sodium iodid solution, by means of a catheter and a Janet-Frank syringe. Dr. W. E. Pennington then made two cystograms.

Cystogram No. 1 shows the bulk of the solution occupying the lower bladder, while cystogram No. 2 shows that most of the fluid has shifted into the upper bladder.

It was our original intention to make stereoscopic cystograms. During the interval required to place a fresh plate for the second cystogram the sodium iodid solution shifted from the lower

to the upper bladder. Hence we were unable to secure stereoscopic pictures.

At present the patient has a residual urine amounting to 240 c.c. He catheterizes himself every other day and absolutely declines to submit to the suggestion that the upper bladder be removed, inasmuch as he feels better than he has for many years.

In view of his age, his wellbeing, his nephritis and his ability to give himself intelligent care, further operation has been deferred.

201 Pennway Building.

241 North Pennsylvania Street.

RÉSUMÉ OF PAST TWO YEARS' PROSTATIC WORK *

W. N. WISHARD, M.D., AND H. G. HAMER
INDIANAPOLIS

The following paper is intended to continue and supplement a report on prostatic hypertrophy by the authors of this résumé two years ago before this association.

The great improvement in the mortality statistics of prostatectomy in recent years is due to several causes. As the operation becomes more widely known and more popular, patients seek relief at an earlier period while their condition is good and with much greater prospects of success.

While many patients seek operation early, there still remains a class who come to operation only as a last resort and it is these cases which require most careful management for successful outcome. Prolonged palliative treatment, careful study of the bodily functions to determine fitness for operation, the selection of a plan of operative procedure best adapted to individual cases and calculated to reduce risk to a minimum, judicious choice of anesthetic, careful postoperative management and good nursing, constitute the principal features most likely to result successfully.

Preparatory treatment consisting of systematic catheterization, continuous drainage by anchored catheter, or by preliminary cystotomy, free water drinking, proctoclysis and administration of urinary antiseptics is common practice.

Deliberation in preparatory treatment gives time for study of the patient's general condition, renal function, etc.

Phthalein elimination, blood urea and blood

* Read before the Indianapolis Session of the Indiana State Medical Association, September, 1919.

creatinin tests have added much to our means of determining fitness for operation, and together with general observation of the patient's condition as to pulse and temperature, condition of lungs and vascular system, bowel elimination, volume of urine and its character as determined by chemical and microscopic analysis, afford fairly definite indication as to the choice of operative procedure.

The one-stage operation under general anesthesia may be chosen if the patient's general condition is good, and there is little impairment of renal function.

The two-stage operation (that is, preliminary cystotomy under nitrous oxid gas or infiltration anesthesia, with subsequent enucleation of the adenomatous prostate under general anesthesia with gas or ether) certainly merits consideration in doubtful cases. Cystotomy under infiltration anesthesia followed by immediate enucleation under general anesthesia is a procedure open to little objection in any case where immediate enucleation is contemplated.

Improvement in the details of technic in performing suprapubic prostatectomy is responsible for its return to popularity. After making a high median suprapubic cystotomy, enucleation of the prostate is begun by inserting the index finger into the vesical orifice and breaking through the urethra anteriorly at the point where the lateral lobes lie in apposition, or at the most available point of cleavage. The obstructing growth is freed from the capsule and delivered into the bladder. The prostate is often enucleated *en masse* or it will be broken up and the lobes removed separately.

An irregular cone-shaped cavity remains. The internal sphincter usually remains intact and soon contracts to normal caliber. The cavity eventually contracts and the torn mucous membrane of the bladder unites with that of the severed urethra. If hemorrhage is profuse any one of several methods of control may be used, namely, gauze packing, suture of the torn mucosa, ligature of bleeding points, implantation of fat, or pressure by means of the Hagner bag. The latter method is rendered more effective by use of a wire anchor.¹

A large suprapubic drainage tube is placed in the bladder and the wound sutured snugly about it.

Irrigations are usually not necessary during the first week or ten days unless infection occurs, in which instance the bladder is irrigated two or three times daily. It is usually

of advantage to fortify the patient against renal collapse immediately after operation by the administration of normal salt solution or plain water by slow proctoclysis once or twice daily.

The suprapubic drainage can ordinarily be removed in a week or so and drainage established by anchored urethral catheter.

Ability to void usually returns with closure of the suprapubic wound.

The routine postoperative management is as follows: When taken from the operating room, the patient is put into a warm bed with hot water bottles about him and proctoclysis is started by drop method and continued until 1 quart is given.

The bladder is not disturbed by irrigation, the dressings which absorb the blood stained urine are changed frequently.

Morphia is given if suffering requires it. Water is given as soon as nausea subsides. After gas anesthesia, there is seldom any disturbance of the stomach and liquids can be taken a few hours after operation. Soft diet is started the following day, and a full tray in three or four days.

A laxative is usually given on the third day.

The Freyer tube is removed on the third day and a smaller one inserted in its place (ordinarily a Guyon syphon, which prevents soiling of the dressings and affords an opportunity to keep a fairly accurate record of the urine secreted).

Free water drinking is encouraged. If the appetite is poor, a tonic of iron and strychnia may be given.

Urotropin in 5 to 10 grain doses three times a day is commonly given from the second or third day.

Irrigations of boracic acid solution are often needed after the first week or before and are given three to five times daily.

The wound sutures are removed on the seventh or eighth day. Suprapubic drainage is replaced by catheter drainage by the urethra in ten days or two weeks, and in some cases much sooner. Curettement of the wound followed by the application of silver nitrate hastens the closure at this period. Plastic closure, by excision of scar tissue and coaptation of the wound about a small drain is sometimes necessary, but, as a rule, delayed healing is caused by some condition within the bladder and such cases suggest the need of cystoscopic inspection as a routine measure.

Complications: Infection in the wound, stitch abscess, etc., require release of tension by re-

1. Hamer, H. G.: J. A. M. A., p. 1694 (June 9) 1917.

removal of one or more of the silk-worm stitches, and thorough cleansing of the bladder and wound by frequent irrigation and a gauze pack kept moist with Dakin's solution, generally bring about a prompt resolution.

A very cloudy urine with much mucus suggests the presence of a foreign body in the bladder, such as a small nodule of detached prostate tissue overlooked at the time of operation or the formation of phosphatic concretions. Detached pieces of tissue may be overlooked or lost in the prostatic cavity and remain to decompose giving rise to suppuration or to become the nucleus of phosphatic calculi.

A cystitis may be maintained by reinfection in an old pyelonephritis.

Epididymitis is of comparatively frequent occurrence unless the testicles are kept supported. Phlebitis occurs occasionally and probably with about the same frequency as after any other surgical operation. Stricture of the vesical orifice occasionally occurs, due to irregular healing following the removal of the prostate.

Many cases require some attention for a period of several weeks after complete healing of the wound. There is a period after drainage has been dispensed with during which the urine is likely to become cloudy and bladder irritability to be manifested by frequent urination and slight fever to persist. Gradual withdrawal of drainage helps to prevent this condition. After the wound closes and the patient is able to void, the catheter may be removed for part of each day and reanchored at night, gradually diminishing the period of drainage as the condition of the urine improves until it is discarded entirely.

Exuberant granulation tissue gives rise to troublesome symptoms when it appears about the vesical orifice or in the suprapubic wound. Cauterization of such growth within the bladder with the high frequency current and curettement with the application of nitrate of silver (if in the suprapubic wound) usually brings about satisfactory results.

Cystoscopy before dismissal is important in helping to avoid the condition after operation likely to prevent a good result.

After removal of the obstruction to urination, the bladder function will depend on the amount of damage the bladder has sustained before operation. If hypertrophy of the bladder wall with diminished capacity exists, frequency of urination will depend on the bladder capacity. On the other hand, an atonic bladder with large capacity may retain some residual urine from lack of expulsive tone.

In summarizing the results in 120 cases recently operated, much interesting data is afforded.

Age: The oldest was 84 and the youngest 45 years of age. The majority of these men were between the ages of 60 and 80 years. Two were above 80 years of age.

Early symptoms: (Before consultation.) Frequency of urination in 63 cases; difficulty or inability to urinate, 34 cases; incontinence or slight dribbling of urine in 3 cases; severe pain in 5 cases; hematuria in 3 cases, and acute retention in 1 case.

Symptoms at the time of consultation: Frequency and difficulty of urination in 55 cases; frequency, difficulty and pain in 37 cases; marked hematuria in 3 cases, and complete retention in 14 cases.

Duration of symptoms prior to consultation: One to 2 years in 22 cases; more than 2 years in 82 cases; more than 5 years in 55 cases; more than 10 years in 25 cases; more than 15 years in 8 cases, and more than 20 years in 2 cases.

Residual urine: Less than 1 ounce in 1 case; more than 1 ounce in 103 cases; more than 4 ounces in 88 cases; more than 10 ounces in 34 cases; more than 15 ounces in 27 cases; more than 20 ounces in 5 cases, and more than 30 ounces in 2 cases. Forty-eight of these cases had had a catheter used prior to consultation.

All of the 120 cases were done by suprapubic operation and 87 by the two-stage method. The interval between the preliminary cystotomy and the enucleation varied from 10 days to 4 months; the average time being 2 to 3 weeks.

Nineteen cases had complications as follows: Vesical calculus, 11; prostatic calculus, 1; papilloma of bladder, 4, and stricture of the urethra, 3.

Postoperative results: Residual urine from 0.5 ounce to 3.5 ounces in 10 cases. One case had 6 or 7 ounces and a recurrence of hypertrophy in the subcervical prostatic glands which is being destroyed by fulguration. The others have good emptying power and good control except one who has some incontinence which is probably due to a spinal lesion as he also has some difficulty in controlling his bowels.

The average stay in the hospital after operation was four and one-half weeks. The minimum stay was seventeen days.

Deaths: Of the 120 cases above reported, two died shortly after the operation and while yet in the hospital. One of these cases died seventeen days after operation from uremia and the other thirteen days following operation from renal insufficiency and pneumonia. Four

have died since leaving the hospital at the following periods: Scirrhus carcinoma, 3 months, 1; uremia, 3 months, 1; bilateral pyonephrosis, 4 months, 1; carcinoma, 15 months, 1; but these four deaths occurring at remote periods are in no way directly attributable to the operation. The mortality from operation was $1\frac{2}{3}$ per cent.

RENAL TUBERCULOSIS *

P. E. McCOWN, M.D.
INDIANAPOLIS

Renal tuberculosis is a disease deserving more thought and attention by the general profession. It is usually regarded as a rare affection associated with the terminal stages of pulmonary tuberculosis for which treatment is of little value. While the best medical opinion regards this condition as secondary in nearly every instance to a lung or other lesion, yet, the original focus of infection having healed or become dormant, from a clinical standpoint, it may seem primary. Some idea of its frequency may be gained from the report of Shapira et al.¹ who, in the study of 600 cases of pulmonary tuberculosis, found sixty-three, or 10 per cent., with urinary symptoms indicative of this condition. In twenty-three cases there were demonstrable bladder lesions. Kuster's statistics showed 158 cases, about 3 per cent., in 5,338 cadavers, while necropsies on tuberculous bodies show its presence in 18 to 33 per cent. by different observers. (Quoted from Wildboltz.)

Keyes (Urology) mentions three avenues by which the tubercle bacillus enters into the kidney: (1) By extension through capsule from contiguous organs as adrenals, probably rare; (2) through the lymphatic channels. Francke seems to have established a lymphatic connection from the colon to each kidney. There also exists a lymphatic anastomosis with the retroperitoneal glands but the lymph flow is towards the glands from the kidney capsule. The third avenue of entrance, that of arterial blood stream, is probably the method of infection in the vast majority of cases. Since the normal kidney has the ability to excrete bacteria, as typhoid and tubercle bacilli, it seems probable that infection does not take place until its natural resistance is lowered by some other cause or, as has been suggested, by tuberculous emboli.

Both kidneys are seldom infected simultaneously. The usual *modus operandi* is the establishment of unilateral renal tuberculosis, its extension to the ureter and bladder and even to the genital organs in the male before involvement of the second kidney takes place.

The early symptoms of renal tuberculosis, unless it is secondary to some well established lesion in lung or other organ, are likely to be obscure. Lassitude, lack of energy which is not restored by rest, is marked in some cases; in others it may be so mild that urinary disturbance is first to call attention to disease. There may be quite a loss of weight, although one of my cases lost not a pound. The color is usually good and there is little change in facial expression. Finally, the patient notices the fact that he is urinating more frequently than usual, especially during sleeping hours. Immediately following is the symptom of urgency or the inability to restrain the desire or the act of urination. Since there are so many conditions in the female pelvis and in the male genital organs producing these symptoms that must be excluded, patients at this stage present a difficult problem as to diagnosis. The urine at this time may not be of any aid in diagnosis as a small amount of albumin, low specific gravity and an occasional leukocyte microscopically found may be the only abnormality. In one of our cases the urine was normal except for low specific gravity until the general and local symptoms pointed unmistakably to some great trouble in the right kidney.

The next change in symptoms is that of burning during and at the end of urination with the feeling that the bladder is not empty. This is followed by urinary strangury increasing to the point of pain in the bladder with constant desire to urinate accompanied by burning. The changes in the urine at this stage are usually considerable. Macroscopic blood may be present and if so, or if one of the tubercles should burst causing a hematuria, it usually greatly alarms the patient. If there is little or no blood, the urine will be slightly turbid or cloudy with a finely granular whitish sediment. With increasing amount of blood the urine becomes smoky, reddish brown to red, and, if there is rapid destruction of kidney substance, there may be pus masses as large as a split pea. Slight albuminuria may exist for months or even years before other symptoms of the disease appear. It is well to bear this in mind, especially should there be no casts or other elements denoting nephritis. Again slight albuminuria with a few blood cells and a history of exposure to tuberculosis should cause us to be very circumspect.

* Presented at the Indianapolis Session of the Indiana State Medical Association, September, 1919.

1. Shapira et al.: J. A. M. A. (March 2) 1918.

Renal tuberculosis is an insidious chronic condition and has, in nearly every instance been in existence several months before sufficient symptoms appear calling attention to its location. There is usually no fever until late in the disease at which time the temperature may rise to 99.4 or 99.6 F. If the kidney pelvis should become blocked by pus masses or stricture formation, due to tuberculous processes in the ureter, the temperature will, as in other retained abscesses, mount higher. Complete closure of the ureter does occur in a few cases causing symptoms that are unmistakably referred to the kidney. In one of our cases this had occurred with an amelioration of the bladder irritation.

Wildboltz² believes that high fever never accompanies pure tuberculosis of the kidney and bladder but that it is caused by mixed infection which is not always demonstrable owing to the anaerobic nature of the organisms.

Pain is an unreliable symptom, some cases have none and others a slight tenderness which is not diagnostic. The normal kidney may be the more tender because of compensatory hypertrophy and the extra work it is forced to carry on. Again we must take into consideration the renorenal reflex in which pain is transferred to the normal kidney from the diseased side. About 50 per cent. of cases will have a dull drawing or aching pain in the loin, which may become severe and colicky if the drainage is blocked by passage of blood, or pus clots, or stricture of the ureter. Urine examined during the time the diseased kidney is isolated from the bladder will show improvement or become almost normal, but the increased kidney pain, rise in temperature, and general symptoms of toxemia will usually warn us not to give a favorable prognosis.

Abdominal palpation is usually of little value. A tuberculous kidney may be large or it may be small or soft if much destruction of tissue has taken place. Occasionally perinephritis may build up folds of adhesions easily felt and on operation a small kidney be found; or the kidney may be held high behind the ribs and may not be palpated. It is well to remember that the normal kidney may be large and tender while on the diseased side we may not feel the kidney or elicit much tenderness. Some patients will call attention to the fact that for months they have had pain in one side but that lately the other loin has caused them more distress. Unless infection has taken place in the other kidney this is due to increased tension through hypertrophy and toxic nephritis. In the later

stages nephritis is caused by the blood being laden with toxins from the diseased process. Finally, in some cases, reliance must be placed on the cystoscope and ureter catheterization to determine which side is involved and to what extent.

In the advancing stages loss of weight with emaciation becomes more pronounced, with all the symptoms of exhaustion as in other advanced tubercular conditions. If the disease remained confined to the urinary organs, many years might elapse before death intervenes. Nature's efforts at spontaneous cure are illustrated by the fact that the kidney and ureter in rare instances have been closed by stricture from the bladder and have become a necrotic, cheesy mass in dense adhesions. The writer has observed a case in which, after five days with fever at 105 and a drop to normal temperature for two days, the kidney stopped functioning entirely. In this instance we could pass the ureter catheter entirely into the kidney pelvis so was sure no urine was secreted. We removed this kidney the following day, finding it to be wholly involved (in the process) and seemingly with little or no circulation. Thus, it would appear that Nature can eliminate or wall off this infection. However, there is a tendency for urinary tuberculosis to spread to the genital organs, more particularly so in the male. The epididymus, seminal vesicles, and prostate become involved. This adds to the severity of the general symptoms, intensifies the bladder disturbance and complicates with another local focus of disease. In the terminal stages the meninges may be affected and be the cause of death. Healed lesions in the lung may break down and tubercle bacilli be expectorated (this occurred in one of our recent cases), or a general miliary tuberculosis may set in.

Renal tuberculosis which remains confined to the kidney, ureter and bladder is a chronic condition. Amelioration of symptoms takes place at times and the patient has hopes of recovery when suddenly all symptoms return. Thus, in uncomplicated cases the patient may lead a precarious existence approximately for three to five years.

The symptoms of bladder distress outlined above do not differ materially from those caused by a severe gonorrheal prostatitis and seminal vesiculitis or a colon bacillus cystitis and pyelitis or infection of the urinary tract by other bacteria. Likewise a kidney may be tender, that is, hydronephrotic, or contain stone. So also may we find blood in the urine of these cases.

2. Wildboltz: *Urologic & Cutan. Rev., Tech. Sup.* (April) 1915.

Since renal tuberculosis has usually associated ureter and bladder involvement the thickened ureter is at times felt in the anterior vault of the vagina on the corresponding side of the kidney infection. In the male, because of possible seminal vesiculitis interposing, we cannot be positive that the ureter is involved.

For absolute diagnosis we must depend on the microscope as illustrated by the following case:

J. B., aged 24, case of gonorrhea. On admission there was no urethral pus for examination, so as is our custom we stained with Loeffler's methylene blue a specimen of sediment from urine. No bacteria were found although his physician reported to us the findings of gonococci some weeks previous. Urine sediment containing pus which shows no bacteria by the ordinary stain and is acid in reaction should always be stained for tubercle bacilli. In this case the urine had a smoky appearance, evidently containing pus and blood from which sediment we stained numerous alcohol acid fast bacilli.

The discovery of tubercle bacilli in the urine seems to be regarded as a difficult or almost impossible task by that portion of the profession not familiar with the work. European authors state that they can stain the organism in 80 per cent. to 90 per cent. of genito-urinary tuberculosis, in fact, in some instances their success by the staining method is such that they have practically given up guinea-pig inoculation as less reliable. Not only has the animal inoculation been found unreliable but in the length of time required to develop tuberculosis in the guinea-pig the organism can be found by repeated stains of the urine sediment. Tuberculous kidneys may discharge few or no germs on the day of the first examination, yet on the next or some subsequent day there may be sufficient bacteria to be easily found. This fact should stimulate us to make repeated examinations not of the same specimen of urine but of different daily specimens. Fresh urine should always be used, better a specimen catheterized in order to eliminate as much as possible the smegma bacilli which are found on the external genitals and whose staining characteristics are similar to those of the tubercle bacillus. Keyes (Urology) states that the bladder is not a host to the smegma bacilli.

In our laboratory the following method of staining tubercle bacilli has been very satisfactory. The suspected urinary sediment is allowed to dry on a slide or cover slip, then heated slightly to make fixation more complete. A generous quantity of carbol fuchsin is spread over the smears and warmed to the steaming

point from three to five minutes; boiling may burst the capsule of the organism. The specimen is then washed with acidulated alcohol, or preferably, with a 10 per cent. to 20 per cent. hydrochloric acid followed by absolute alcohol until free from the visible red stain. The smear is then covered with Loeffler's methylene blue stain for about thirty seconds, washed, and dried. It has been found impossible in many proven instances to liberate the carbol fuchsin from the smegma bacillus, so we may find the red smegma as well as tubercle bacilli in our otherwise blue field. After considerable work investigators have determined that, while the size and shape, as well as the staining characteristics of the tubercle bacilli and smegma are similar, the smegma bacillus is found on the field as single organisms, the tubercle bacilli appearing in characteristic sheaves or groups.

As has been stated in the symptomatology, urine of acid reaction, low specific gravity, small amounts of albumin and pus, with the absence of casts and other nephritic stigmata or demonstrable bacteria, should be regarded as possibly tuberculous.

The ophthalmo, von Pirquet, and other popular tuberculin tests may be used but their extreme sensitiveness in showing positive reaction, even in healed lesions, make them of little value. Subcutaneous injection of small amount of tuberculin has brought down the organism in suspected urine. In addition to the general reaction there may be increased local tenderness in the loin with more prominent bladder symptoms. This test is valuable in that it not only shows the presence of tuberculosis but some times its locality. The newer biologic tests for tuberculosis we have not used, feeling that they are yet in the experimental stage.

With the finding of tubercle bacilli in the urine or the presence of suspicious symptoms it is customary to proceed with methods that will show the location and the extent of involvement. The cystoscope and use of kidney function tests are invaluable. Especially is the cystoscope valuable in differentiation of kidney disease and other abdominal conditions. All too frequently do we examine patients who have had their appendix or gallbladder operated with no relief in symptoms.

The writer has a case of colon bacillus pyelonephritis in which four operations, three abdominal, were made without true recognition of her condition.

Simple viewing of the bladder may show a reddened ureteral orifice on one side or, if the disease has extended to the ureter, small tuber-

cles about the orifice. Tuberculous ulcerations about ureter or trigone are of much assistance. These ulcers have their edges surrounded by normal mucosa and will mostly be found near ureter of affected kidney, in contradistinction to generalized ulcerative cystitis. Pieces of tissue from the edges of these ulcers removed through the operating cystoscopes show tubercle bacilli.

Catheterization of ureters and segregation of urines will localize the disease in one or both kidneys. Examination of these urines should bring definite diagnosis nearer. In unilateral renal tuberculosis we will probably find all the elements of urinary tuberculosis in one specimen and normal urine from the other side. If the condition is very chronic, however, elements of toxic nephritis may be seen in the urine from the supposedly uninfected side. It is well to give both urines a thorough examination. The quantity of urine thrown out from the affected side is usually greater than that from the normal kidney. Examination will show this to be mostly water and pus with little normal urinary salts while the urine from the normal kidney will be of higher specific gravity and contain the normal urinary salts in proper or increased amount.

This will be verified by the intravenous injection of phenolsulphonaphthalein, vastly more of this drug being recovered from the normal kidney. The indigo carmin, intravenously injected, may be observed spouting from the ureters, the heavier blue cloud, of course, coming from the kidney with the best function. After painstaking experimentation with the ten most popular function tests, Thomas³ believes these two tests equal and better in many respects to all others. Not only are function tests valuable as an aid to estimation of the amount of destruction and other valuable data but in the following case it was indispensable:

Mrs. W., aged 33, mother of five boys. History of pain in right kidney four months, frequency of urination five weeks. For two weeks afternoon temperature near 100 F. Lost a pound a day for thirteen days. Weight 84, emaciated. Right kidney was palpable and tender. Repeated urine examination revealed nothing abnormal except low specific gravity. Segregated specimens did not help. Four-fifths of the phenolsulphonaphthalein, intravenously injected, was recovered from the left kidney. This evidence, coupled with the rapid decline and emaciation, caused us to decide on nephrectomy for probable tuberculosis. At operation, Aug. 14, 1916, we found a slightly enlarged

kidney whose pelvis and papilla were normal. There was a miliary involvement of cortical region with evidence of extension toward medulla. By acting on the slender evidence of phenolsulphonaphthalein output we probably saved her from a rapidly fulminating condition.

Very small contracted bladders occasionally prevent cystoscopy denying us the most satisfactory evidence on which to base prognosis and treatment. In such an event, providing sufficient phenolsulphonaphthalein can be recovered in bladder urine, cutting down on both kidneys for examination may be necessary to determine the extent of the disease and the therapy.

Renal tuberculosis is essentially a chronic disease. In many instances it has existed for months before the patient seeks medical aid and may continue months before suspicion is directed to the true nature of the disease.

Renal tuberculosis confined to one kidney is a surgical disease. Even though we do not remove the tuberculous lesions in the bladder by doing a nephrectomy, we remove the massive dose of infection and toxemia. By this procedure not only is the great source of toxemia removed but the ratio of the body's natural defenses to the remaining foci is favorably affected.

In the medical treatment of this disease creosote and various drugs of supposed specific action in tuberculosis have been used. Regulation of habits and mode of living, in fact, treatment along lines laid down in pulmonary tuberculosis, are helpful. The drinking of copious quantities of water keeps the pus washed out of the urinary system and give some relief from burning. Instillations into the bladder of corrosive sublimate, 1:10,000; gomenol oil, 20 per cent. in albolene oil, and other antiseptics may quiet bladder symptoms. Refined preparations of sandalwood oil in spite of its somewhat deleterious effect on the kidney has given much relief from strangury in the advanced hopeless cases and saved the use of large amounts of morphin.

Tuberculin has been of some assistance in the medical treatment of this disease but is probably of greater value after nephrectomy in helping to heal the bladder lesions. Dillingham⁴ reports the clinical cure of fifty cases of tuberculosis of kidney and bladder by hygienic measures and tuberculin. The average dose is $\frac{1}{75000}$ mg. twice weekly. The patient should feel better at once and continue so for two or three days. If this result is not obtained he reduced his doses as low as $\frac{1}{750000}$ mg. His

3. Thomas: J. A. M. A. (Nov. 24) 1917.

4. Dillingham: California State M. J., 15, 70, 1917.

patients averaged from three to five years on treatment. However, most other reports are not so optimistic.

From the report of the German Urological Congress, Vienna, 1911, we find that Israel,⁵ Berlin, warns against placing too much reliance on tuberculin, and recommends early operation on unilateral cases. R. Bachrach, after a trial of tuberculin in Zuckerhandl's clinic, reports as follows: 1. Operable renal tuberculosis is not a field for application of tuberculin therapy. 2. Early cases, namely, those in which tubercle bacilli are found without there being any suppurative process, may be regarded as suitable for tuberculin until indication for nephrectomy may be set. 3. When nephrectomy has been done and there is still other foci in the urogenital tract, the method is to be recommended. 4. The action of tuberculin manifests itself in an improvement of the general condition and increased body weight. 5. The condition of the local lesions do not appear to be ameliorated. 6. Tuberculin treatment should be carried out in such a manner as to produce no reaction. 7. The inoperable cases are not affected by tuberculin therapy, but, in lieu of other therapeutic means, tuberculin may be tried. We have had two cases under observation which seemed to fall under heading No. 2, namely, tubercle bacilli in urine with absence of pus. One case, the wife of a physician, the writer was able to follow from time of examination, April, 1912, until about eighteen months ago. Her main symptoms, besides slight loss of weight and energy, was urinary frequency. An otherwise normal urine contained many alcohol fast bacilli in groups. Ureteral catheterization found these bacteria in both kidneys. Hygienic measures and tuberculin were obviously the only treatments admissible since both kidneys were functioning properly. This lady regained her weight and strength with a disappearance of the organism and had not had a recurrence five years later. The writer has always doubted whether he was dealing with true renal tuberculosis. The other case was manifestly one in which the kidneys were eliminating tubercle bacilli from a lung lesion of some magnitude.

Dandoy⁶ believes in the efficacy of tuberculin, especially in the early cases, and after nephrectomy, advising the use of very dilute doses.

Wildboltz,⁷ a firm believer in surgical treatment of urinary tuberculosis, cites 316 cases conservatively treated which he was able to col-

lect from internists. This record shows 31 per cent. died within two years, 27 per cent. died within three to five years, while 2.5 per cent. lived ten or more years. He believes internists are over enthusiastic in reporting cures, not waiting sufficient time and not using adequate means to prove a cure.

The disappearance of tubercle bacilli in urine may be brought about by autonephrectomy or closure of the ureter but these cases are liable to break down or extend to the genital organs. (The writer has such a case at the present time.)

As against the high mortality from conservative treatment Wildboltz cites the death rate from operation among various European surgeons as follows: Albarran, 118 nephrectomies for tuberculosis, 3.3 per cent. deaths; Rovsing, 106 nephrectomies for tuberculosis, 5.7 per cent. deaths; Zuckerhandl, 104 nephrectomies for tuberculosis, 7.7 per cent. deaths; Wildboltz, 139 nephrectomies for tuberculosis, 2.8 per cent. deaths. In this report we have the early mortality. Israel,⁸ reviewing the remote results of 1,023 operated cases with the aid of twenty-one other surgeons and 170 personal cases, finds a mortality of 12.9 per cent. in the first six months and a later mortality of 14.2 per cent., mostly within the subsequent two years. Of his own 170 cases there was a complete disappearance of tubercle bacilli in 63 per cent. In a general way the cases of long standing at time of operation were the ones with slower healing and disappearance of bladder symptoms. Wildboltz' 139 cases, three years after operation, were 58.9 per cent. cured, and while there were 21.7 per cent. unhealed cases most of them were able to attend to their work. His results were obviously much better among people of higher social standing, also in the early cases. The remote results of renal tuberculosis surgically treated reported by American surgeons are equal and in some respects better than their European brethren. Cabot and Crabtree⁹ report on seventy cases which had been operated three years at time of report. The immediate mortality was 3.8 per cent.; causes: pneumonia, shock, and accident. The late mortality was 20 per cent., half of which occurred within two years, the other half within five years. Young persons with early cortical lesions do less well than older persons with more advanced lesions, probably because of lack of establishment of immunity. They suggest artificial immuniza-

5. Israel: German Urological Congress, Vienna, *Folio Urologic* (Sept.) 1911.

6. Dandoy: *Rev. Clinique D'Urologic* (Jan.) 1912.

7. Wildboltz: *Urol. & Cutan. Rev., Tech. Sup.* (April) 1915.

8. Israel: *Folio Urologica* (Sept.) 1911.

9. Cabot and Crabtree: *Surg., Gynec. & Obst.* (Dec.) 1915.

Lower and Shupe¹⁰ report on the end results of eighty-seven conservative nephrectomies performed by Drs. Bunts, Crile and Lower for renal tuberculosis. The early mortality was 2.3 per cent. The late mortality showed two deaths from tuberculous peritonitis, four deaths from pulmonary tuberculosis and four deaths from unknown causes. They believe 60 per cent. of their cases to be cured. They arrive at the following conclusion: "The length of time during which the bladder symptoms persist after operation is directly proportionate to the duration of the symptoms before operation."

The mortality from nephrectomy has shown a steady decrease during the last twenty years due to our much improved method of diagnosis. The great interest of urologic surgeons in developing accurate methods for the estimation of separate kidney function has made nephrectomy, when indicated, a safe operation. This is well illustrated by B. A. Thomas'¹¹ investigation in which he found the alarming status that in "twenty-six hospitals in this and neighboring states the mortality for nephrectomy and prostatectomy at the hands of general surgeons was 25.9 and 22.5 per cent., respectively, as contrasted with 7.7 and 4.33 per cent. in seven times the number of operations by eight of the world's most noted urologists. In other words, this means that in a large minority of such operations from 75 to 80 per cent. of deaths are avoidable."

Rather than describe the general technic of nephrectomy which is excellently illustrated in the later books of urology, the writer desires to bring out a few details which seem to him of value. A large incision will be of great help in exposing the kidney and getting to its pedicle, it will save time, save maceration of the kidney and wound contamination. We have used an oblique incision from the anterior border of the sacrospinalis muscle and below the twelfth rib extending forward to the tip of the rib or, if necessary, to a point above the anterior superior spine of the ilium. This incision will permit the removal of a considerable portion of the ureter and much greater ease in freeing and enucleating the kidney. A large wound will heal more rapidly than a small one in the absence of traumatism and with the insertion of proper drainage. It seems best to divide the ureter first, permitting greater access to renal vessels. The vessels should be well cleaned of adhesions to insure secure ligation. Single thread ligatures,

repeated if desired, are less liable to slip than double threads. At the present time the consensus of professional opinion does not recommend total removal of ureter because of prolonging operation. All measures contributing to the saving of time and gentle manipulations will insure more satisfactory results.

Persistence of urinary symptoms after operation is one of the conditions confronting the surgeon for solution. In the large majority of cases amelioration takes place early and offers much encouragement to the patient, yet the continuation of frequency or urination, even though mild, will bring inquiry concerning relief. In our own limited observation this annoyance is more prevalent in women than in men, probably because economic conditions give women more time to analyze their conditions while the male has returned to his usual avocation and rejoices in his returning strength and weight. However, in extensive bladder tuberculosis healing does not always readily take place and a system of treatment, including instillations mentioned under medical treatment, along with tuberculin and hygienic living, will be necessary before a cure can be established. Wound fistulae may persist for months and even years and will require, in addition to the above mentioned general treatment, local antiseptics and stimulants. Beck's bismuth paste has been of great aid for these discharging wounds.

Knowledge that there is only one remaining kidney causes patients considerable worry and they will come in complaining of pain in this kidney. In a large percentage of cases this will prove imaginary but of course will necessitate urinalysis of bladder urine or urine catheterized from the ureter of remaining kidney if cystitis persists. Sympathetic hearings and examination of these symptoms along with encouragement will be of great value through the convalescent period of this condition. Patients will be encouraged by their gain in weight which is usually 20 to 30 pounds, in one of our cases 60 pounds, in a year.

Renal tuberculosis is a condition which calls for early diagnosis if good results are to be secured from therapeutic measures. The earlier the diagnosis, the greater percentage of cures. More attention must be paid to urinary symptoms and their causes. In the beginning the disease is practically always unilateral, but spreads to the ureter, bladder, genitals, opposite kidney, and other organs. Early nephrectomy is indicated.

521 Hume-Mansur Building.

10. Lower and Shupe: *Surg., Gynec. & Obst.* (Nov.) 1917.
11. Thomas, B. A.: *The Significance of Specialism in Surgery, etc.*, Penn. M. J., 20, 101, 1916.

TESTING KIDNEY FUNCTION *

A. C. YODER, A.B., M.D.
GOSHEN, IND.

INTRODUCTORY

In recent years a wealth of literature has sprung up concerning the estimation of the function of kidneys. Methods and procedures to determine the efficiency of kidneys, or the impairment of their activity, have been brought forth, the literature about which is so prolific that it is almost bewildering. I have endeavored, in the last year or two, to follow this, to the end that something could be found available, practicable and helpful to the busy general practitioner.

All the while I was moved by two thoughts: First, there is the presumption on my part that every practitioner has what I find in my own practice, a large number of ambulatory cases, chronic in type, many of whom have certain few definite signs and symptoms, but more of whom have numerous aches and complaints and disabilities the basal explanation of which is often more or less of a conjecture on our part. They complain of headache, or backache, or of aching limbs, of tingling or a numbness in the hands or feet, of local swellings or puffiness, which comes and goes, of weakness, of experiences of shortness of breath, of inability to sleep, of fluttering heart, etc. Many of these patients have good appetites. If the question is asked, "Do your hands swell?" the answer often is, "Oh yes, mornings when I get up my hands are puffed and stiff." With reference to the ankles, they will often answer that mornings their ankles and lower limbs are so swollen that they can hardly lace their shoes. You ask for a sample of their urine and look for albumin and find that there is none; then you say, "Collect your urine for twenty-four hours and bring me a sample of that." But no albumin is found. Then one is forced to ponder. Shall he treat the heart, or shall he treat the kidneys? Or is the cause of these local edemas yet other; possibly an arthritis, or vasomotor disturbance, or what not. In short, we are at sea.

The second thought with which I have approached this subject has been, do these various methods of determining kidney efficiency reveal any information more than that which is obtained from the old routine examination of the urine in which specific gravity, presence or absence of albumin and sugar, are the points

determined. For it is manifest, unless further light is thrown on a case, time-consuming investigations would not adapt themselves to the routine of the busy practitioner. I am not ready as yet to give an answer to this phase of the question, but the outlook is very hopeful, and I realize that the answer, so far as it pertains to any given doctor, will depend to a degree on the attitude of that doctor, and in a larger measure on the mastery of any given procedure by that doctor. The same comment can be made with respect to almost any other method of procedure. Some doctors hold that the application of the Wassermann test to their cases is a great help in the handling of them; others hold that the Wassermann test is of no help to them. Therefore, whether or not a given investigation, which has for its aim the elucidation of the functional efficiency or impairment of the kidneys has value or merit or helpfulness, is a matter to be worked out by the individual practitioner himself.

Our problem is a part of the general problem which is an attempt to determine the status of an organ or organs from the abnormal sensations, feelings, and events and individual experiences, and from his physical conditions, so far as it is possible to determine them. The former we are wont to call symptoms, the latter, signs or physical findings. For example, a patient has a cough and complains of a stitch in his side. Percussion over the area of pain is normal, but auscultation reveals a friction rub simultaneous with the respiratory acts. A few days later the cough subsides to a degree, flatness replaces normal resonance, and the respiratory murmur is practically absent over this area. We conclude that the trouble is in the pleura and that its status in this particular area was that of an inflammation resulting in an effusion. The aspirating needle and postmortems in sufficient previous similar cases made for us a diagnosis beyond a doubt.

Naturally similar lines of reasoning have been applied in an effort to determine the diseased state of kidneys. For many years the profession was satisfied with the results thus attained in the way of diagnoses. In due course of time, however, close study and observation by men who had the opportunity revealed the fact that many times the postmortem findings did not tally with the conclusions reached from the clinical and physical findings during life. So frequent were these mistakes that men disparaged of forecasting the exact lesion in the kidneys that would account for the symptomatology. Gradually, less and less was said of the anatomic

* Presented before the Indianapolis Session of the Indiana State Medical Association, September, 1919.

lesion that might be present in the kidneys in a given case, and more and more was said concerning the function of the organs; more and more was said, and is being said, as to whether the function of the kidneys is normal or abnormal. Function claims the attention of clinicians; the anatomic lesion seems a minor matter.

This brings us squarely to the question, "What is the function of the kidneys?" For, manifestly, if we conclude that the kidneys of a certain individual are inefficient in the performance of their work, it is presumed that we know what that work is that they should do. Broadly speaking, and in order not to dwell too minutely, we will answer this question by saying that kidneys, to functionate normally, should excrete their physiologic product, an average urine, or a urine within the range of normal variation.

METHODS

Methods of investigating kidney efficiency may be classified into three great groups: (1) The introduction into the human body of foreign substances; (2) the study of the blood, and (3) the study of the urine, or urinalysis.

Group 1.—Foreign substances or chemicals, some of them dyes, are introduced into the body either by mouth, or intramuscularly, or even intravenously. The rate and the amount of their excretion in the urine is then studied. A sufficient number of cases have been studied by investigators to establish normal standards. Comparisons are then made. Potassium iodid and lactose have been used for this purpose. Of the dyes, methylene blue, indigo carmine and phenolsulphonephthalein have been used. The use of the latter has become routine in clinical laboratories where these tests are done, and the phthalein has practically replaced the other dyes for this purpose.

Phenolsulphonephthalein is described as "a bright red crystalline powder somewhat soluble in water and alcohol, but readily soluble in the presence of alkalis. The drug, as determined by Abel and Rowntree, is nontoxic, excreted with extraordinary rapidity, and appearing in the urine normally within a few minutes of injection. In alkaline solution a brilliant red color is produced, which is ideally adapted for quantitative colorimetric estimations."¹ The chief points of interest about this chemical are the facts that it is nontoxic, that it is practically entirely eliminated by the kidneys, that elimination normally starts within a few minutes after its administration, and that normally within two

hours after its administration, 60 per cent. or more of the drug is eliminated. The phthalein appears earliest in the urine when it is administered intravenously; not quite so early when administered intramuscularly and is still a little later in its appearance when administered subcutaneously.

For the general run of cases the subcutaneous or intramuscular routes of administration are to be preferred. The main points in the technic are the following: Ampules are on the market, each holding a little more than 1 c.c. and each c.c. of the solution holding 6 mg. of the phthalein. Twenty minutes to half an hour before the test is to be started, the patient is asked to drink 300 to 400 c.c. of water. The patient is then asked to empty his or her bladder, and immediately afterwards, exactly 1 c.c. of the phthalein solution is injected into the lumbar muscles. The urine is collected an hour and ten minutes after the injection is made; and again an hour after this collection. It takes about two and a half hours of the patient's time to do this test; it takes less than half an hour of the doctor's time, and the doctor can be waiting on other patients during these hour intervals.

The estimation of the percentage of elimination is done by the colorimetric method. The Dunning colorimeter may be used as follows: "Dilute the specimen to about 200 c.c. with water and render alkaline by the addition of 10 c.c. of a 5 per cent. solution of sodium hydroxid, then further dilute the alkaline urine with sufficient water to make it measure 1 liter. Enough of this dilution should be perfectly clarified, by filtration, to fill the open ampule. This ampule, containing the specimen, should then be placed in the center hole of the colorimeter box and compared with the sealed and marked test ampules until the one that most nearly matches the specimen in color is found. From this comparison, the phenolsulphonephthalein content of the specimen may be approximately estimated. More rapid and closer comparisons may be made by using two test ampules at a time, one on either side of the specimen. The percentage of output, between the ampule numbers, may be more closely approximated by this method. If, after adding the alkali to the specimen, the coloration is slight, showing small excretion of the 'phthalein,' then the dilution should be carried only to 250 to 500 c.c. and the reading, divided by 4 or 2, as the case may be." This method necessitates the purchase of the Dunning colorimeter, the cost of which is \$5.

¹ Geraghty and Rowntree: *J. A. M. A.*, Vol. 57, p. 811 (Sept. 2) 1911.

Or one can make his own standard solution by adding 1 c.c. of the phthalein solution to 100 c.c. of distilled water. Enough remains in the ampule, after 1 c.c. has been removed for injection into the lumbar muscles of the patient, to make this standard solution. Two test tubes of the same diameter are selected.² Five c.c. of the standard solution are measured into one of them; into the other are measured 5 c.c. of the specimen to be tested, diluted and made alkaline as described above in the description of the use of the Dunning colorimeter. Enough distilled water is added out of a burette to the 5 c.c. standard solution until this diluted standard solution matches in color the specimen. The number, representing the number of c.c. of distilled water added to the standard solution is added to 5. This sum divided into 5, gives a quotient, which in terms of 100, is the number representing the percentage of elimination. Let us suppose that 5 c.c. of distilled water are added to the standard solution. To follow the above rule we would say, 5 plus 5 divided into 5.

$$\frac{5}{5+5} = \frac{5}{10} = \frac{50}{100} = 50 \text{ per cent.}$$

This would mean that there is an elimination of 50 per cent. of the dye. Incidentally, were the amount of phthalein solution in the diluted urine known, and we would wish to figure how much distilled water must be added to the standard solution in order to match the colors, that number would be obtained by multiplying 5, the number of c.c. of standard solution by the quotient obtained by dividing the amount of phthalein solution in the 5 c.c. of diluted urine into the amount of phthalein solution in the standard; subtracting 5 from the product would give the number of c.c. of distilled water that would have to be added.

What is the interpretation to be given to the above computations? Hynson, Westcott and Dunning Company state in their advertising and descriptive catalogue that "the average normal eliminations after intramuscular injections are 50 per cent. the first hour and 85 per cent. for two hours." Hamman³ concludes that "normally the phthalein output for two hours is 60 per cent. or over. An output from 50 to 60 per cent. represents a slight, almost a negligible, impairment of function; from 40 to 50 per cent., a moderate but definite impairment; from 20 to 40 per cent., a marked impairment; from 10 to

20 per cent., a serious impairment, and below 10 per cent., a critical impairment."

The phthalein test of kidney function is approved by the foremost clinicians of today. It is easy of execution, the cost is nominal, one ampule holding the required amount for one test costing 10 cents. Do not all these facts commend the method for our consideration? It is the method, par excellence, to determine the efficiency of one kidney compared with that of its mate. Of course, in this event, one must resort to ureteral catheterization. The time of appearance of the dye in the urine, after the injection is made, is the point to be determined. The affected kidney shows *delayed* excretion of the dye.

Group 2.—The second group of methods of testing kidney efficiency pertains to the chemical examination of the blood. In a general way, we may say that urine is made from the blood. Plate 1 shows in a magnified way the minute anatomy of the kidney and the way it is linked with the vascular system. Urine results from the activity of two processes, filtration and absorption. Constituents from the plasma of the blood filter through the glomeruli of the kidneys; the lining epithelial cells of the kidney tubules reabsorb certain of these products, the so-called threshold bodies; and they reject certain other products, the so-called no-threshold bodies, which pass on into the collecting tubules and form the urine.⁴ "In short, the modern theory holds that the constituents of the plasma which I have termed threshold bodies are taken up by the cells of the tubules and return to the blood, while the no-threshold substances, such as urea, are rejected and can escape only by the ureter. . . . The cells lining the tubules thus absorb from the glomerular filtrate a slightly alkaline fluid containing sugar, amino-acids and other similar food substances, and chlorid sodium, and potassium in approximately the proportions in which they are present in normal plasma. . . . The function of the kidney may thus be shortly defined as the filtration of the noncolloid constituents through the capsule, and the absorption of 'Locke's fluid' through the tubule cells. The capsule furnishes the tubules with the fluid as it exists in the circulation, the tubules return to the blood the fluid best adapted for the tissues, and allow the rest to escape in the urine." It seems to me the writer might have said "the rest to escape *as* urine."

If, then, urine comes from blood, and if the one goes into the kidneys as blood and the other

2. Hamman: Med. Clin. of North America, Vol. 1, p. 155 (July) 1917.

3. Hamman: Loc. Cit.

4. Cushny: The Secretion of the Urine, pp. 47 and 98.

comes out of the kidneys as urine, and if the kidneys are the wonderland where this magic change "is worked," it is reasonable to suppose that, if the kidneys fail to do their duty the blood constituents will vary from the normal. For example, we know that 90 per cent. of the nitrogen that is eliminated from the human body is eliminated in the urine, and that from 85 to 92 per cent. of this is eliminated in the form of urea nitrogen. One of the chief functions of the kidneys being the elimination of nitrogen containing end-products, the chief of which is urea, the kidneys failing in this, would allow an accumulation of urea in the blood. Hence analyses of the blood to estimate the amount of urea are done to secure information as to kidney efficiency. Normally blood contains about 15 mg. of urea per 100 c.c. of blood.

This phase of the problem may be approached from another angle. The metabolism of the proteid molecule results in the formation of the nitrogen containing end products and as we have said before about 90 per cent. of the nitrogen leaves the body through the kidneys, in the various end products, such as urea, uric acid, creatinine, and quite a number of others in small amounts.

In answer to the question, then, "Are the kidneys working efficiently?" one may say we will see how much of this nitrogen is in the end products found in the urine. Another will say we will see in what proportion these nitrogen containing end products circulate in the blood. If they are circulating in the blood in larger quantities than normal, it is sufficient evidence that the kidneys are falling short in their work of elimination. Hence the blood is analyzed and not the urine. For similar reasons some investigators hold that in diabetes the *blood* should be analyzed rather than the urine; that we should look for a hyperglycemia rather than for a glycosuria; and that to know the amount of sugar in the *blood* is a truer index of the patient's condition than to know the amount of sugar in the urine.

The point is that we may do blood analyses to determine kidney efficiency, and, to refer again to the elimination of nitrogen, this being such an important function of the kidney, eliminating 90 per cent. of the nitrogen, the problem of attack has become, in the minds of some clinical investigators, what is the nitrogen content of the blood; or rather what is the non-proteid nitrogen content of the blood, the proteid nitrogen existing for purposes of nutrition, the nonproteid nitrogen awaiting its turn for elimination. In other words, the blood plasma

has two forms of nitrogen, the proteid nitrogen in the proteid molecules, the nonproteid nitrogen in the proteid end-products. It is the nitrogen in the latter with which we are concerned, and it exists in normal conditions ranging in amounts from 25 to 40 mg. in 100 c.c. of blood serum.

Nonproteid nitrogen of the blood is also called, incoagulable nitrogen, rest, or residual nitrogen. Its significance in the blood may be summarized as follows: "It must not be overlooked that abnormally high values for nitrogenous waste products are not always due to kidney deficiency. When the values are only slightly higher than normal, a nonprotein nitrogen of from 50 to 60 mg. in 100 c.c. of blood may be due to an abnormally high destruction of body protein or a deficient circulation. In those cases in which the nonprotein nitrogen is very high, 80 or above, in our estimation, the only cause is kidney involvement."⁵

The estimation of the nonprotein nitrogen in the blood is somewhat technical and time consuming, therefore, investigators have looked about to see whether there might not be some more practical way. It has been concluded on the part of some that the desired information may be obtained by the quantitative study of some *one* of the nonproteid nitrogen containing constituents of the blood. Instead of estimating the total nonproteid nitrogen, *one* of the bodies or substances containing nonproteid nitrogen is studied. Hence, some have worked out the estimation of urea in the blood, others uric acid, others creatinine, all of these substances carrying nonproteid nitrogen.

The estimation of urea and creatinine are especially recommended as being practicable. In the Massachusetts General Hospital, Case Record No. 4,021, the following comment is made: "The normal urea nitrogen is 12 to 15 mg. per 100 c.c. of blood. The urea nitrogen test is as valuable as the nonprotein nitrogen test, is much simpler, and can be done in less time and at less expense." In this record reference is made to an article by Van Slyke and Cullen⁶ in which the technic is described.

It has been determined that creatinine is most easily eliminated by the kidneys, uric acid with most difficulty, urea holding an intermediate place; or this may be stated that a slight impairment of kidney function shows itself first of all by a retention of uric acid in the blood; more

5. Gtettler and St. George: The Value of Modern Blood Chemistry to the Clinician, J. A. M. A., Vol. 71, p. 2033 (Dec. 21) 1918.

6. Van Slyke and Cullen: J. A. M. A., Vol. 62, p. 1558, (May 16) 1914.

marked impairment by retention of urea; serious impairment by the retention of creatinine. It is therefore concluded that an excess of uric acid in the blood, urea and creatinine being normal, means a *beginning* of kidney involvement. A physician is hereby enabled to give early treatment and, best of all, early advice as to manner of life and eating in order that the patient may avoid further inroads of his disease. On the other hand, an excess of creatinine in the blood is of grave prognostic import, meaning the patient is in the end stage of his disease. "As a prognostic test the blood creatinine has been found of very great service, over 5 mg. to 100 c.c. having invariably proved fatal after the lapse of a comparatively short period of time."⁷

Finally, we come to the methods of the third group, analyses of the kidney product, the urine. All of us engage in the time honored practice of estimating specific gravity, and testing for sugar and albumin. Much more may be done.

A study of a large number of normal individuals has revealed a great many interesting things about the action of the kidneys.

In the first place normal kidneys respond rapidly to the ingestion of fluids, "so that within a few hours a marked diuresis occurs. The following observation may serve as an illustration of this previously well established fact: Time interval, 6 p. m. to 8 p. m., urine volume, 84 c.c.; 8 p. m. to 10 p. m., 590 c.c.; 10 p. m. to 8 a. m., 361 c.c.; fluid ingested, 7:30 p. m., supper, with 1,000 c.c. of water. In this instance, within two and one-half hours of drinking 1,000 c.c. of water, over 590 c.c. were eliminated, while during the eight-hour period following the diuresis, only 361 c.c. of urine were voided."⁸ If, normally, kidneys act promptly in the elimination of water or other ingested fluids, their efficiency may be tested by introducing into the body definite amounts of fluids, and later collecting and measuring the excreted urine. This is called the provocative polyuria test for kidney efficiency. It is a recognition of the well established fact that the kidneys may be *deficient* in the elimination of any one of the urinary constituents, including water, and efficient in the elimination of others. "Under normal circumstances the polyuria appears within the first half hour, reaching its maximum at this time, and quickly sinking. . . . If the functional power of the organ is below normal, the polyuria is delayed or does not occur and the amount of

variation from the normal may be taken as a fair measure of the incapacity.

"Straus-Grünwald Method. — The patient takes nothing after 7 p. m. into the stomach. At 6:30 a. m. the following morning a pint of water is ingested. The night urine is collected; also that voided at 7, 8, 9, 10 and 11 a. m. The amount and specific gravity of each portion are recorded. The patient remains in a reclining position during the time of the test.

"In normal cases an amount of urine is passed in the first three hours equal to that which was drunk. That is by 10 a. m. at least a pint is voided. At 8 a. m. the specific gravity is lowest. Variations in the amount voided, time required, and specific gravity will indicate abnormal renal function."⁹

Most important observations concerning the action of the kidneys in health and disease have been made in connection with the application of the so-called renal test meal. It was in 1914 that Hedinger and Schlayer¹⁰ first published their observations. Since this time Mosenthal, of Johns Hopkins University Medical School, has written much concerning this same subject and has done more than any one else to popularize and to show the practicability of the application of the renal test meal and the deductions to be derived therefrom. In the recent literature all prominent clinicians speak with high favor concerning the use of the renal test meal in investigating kidney efficiency. Concerning the conclusions of Hedinger and Schlayer, Mosenthal¹¹ says: "These authors show how the urinary response to a full dietary containing a reasonable amount of fluids, salt and purins varies in health and disease. They found that the normal and the nephritic individual differ very markedly from one another in the results obtained with the so-called 'nephritic test meal.' Not only can the absence or presence of impairment of renal function be determined, but likewise its intensity."

The individual is placed on a special diet for twenty-four hours. Minute verbal or printed instructions are given. The following is a copy of the printed instructions I hand to the patient to be investigated:

DIRECTIONS

Breakfast: Oatmeal, two heaping table-spoonsful, with one-half teaspoonful sugar and an ounce of milk; two whole slices bread, average thickness and average sized loaf; butter, two

7. Chase and Myers: J. A. M. A., Vol. 67, p. 932 (Sept. 23) 1916.

8. Mosenthal: Renal Function as Measured by the Elimination of Fluids, Salt and Nitrogen, and the Specific Gravity of the Urine, Arch. Int. Med., Vol. 16, p. 733 (Nov.) 1915.

9. Barton: Manual of Vital Function Testing Methods and Their Interpretation, p. 86.

10. Hedinger and Schlayer: Deutsch. Arch. f. klin. med., 64, 120, 1914.

11. Mosenthal: Loc. Cit.

cubes; coffee, one cup (5 ounces) with teaspoonful sugar and ounce of milk; milk, 7 ounces; water, 7 ounces.

Dinner: Meat soup, 6 ounces; beefsteak, one portion; potato, baked, mashed or boiled, average helping; green vegetables, as desired; bread and butter, as above; tea, 6 ounces, with one teaspoonful sugar and ounce of milk; pudding (tapioca or rice), one dish; water, 6 ounces.

Supper: Two eggs, any style; bread and butter, as above; tea, sugar and milk, as above; fruit (stewed or fresh), one portion; water 8 ounces.

Use an average amount of salt in the preparation of foods. Breakfast promptly at 8 a. m. (after urinating). Dinner promptly at 12 noon (after urinating). Supper promptly at 5 p. m. Nothing more to eat nor drink until after 8 a. m. next morning. Do not eat nor drink anything between meals.

Urine is collected in seven jars, six jars for the twelve hours, day urine; one jar for twelve hours night urine. Urinate promptly at 8 a. m. (This urine is not collected.) After this, urine is collected during the day twelve hours, in the two-hour periods as indicated on the jars; that which is passed between 8 and 10 a. m., including that which is passed at 10 a. m., in the first jar; after that to and including that at 12 noon, in the second jar, and so on (8 to 10, 10 to 12, 12 to 2, 2 to 4, 4 to 6, 6 to 8, 8 to 8 a. m. next morning).

A comparison of above directions as to what is to be ingested, with Mosenthal's¹² dietary shows what modifications I have made.

Breakfast: Boiled oatmeal, 100 gm.; sugar, one-half teaspoonful; milk, 30 c.c.; two slices of bread (30 gm. each); butter, 20 gm.; coffee, 160 c.c.; sugar, one teaspoonful; milk, 40 c.c.; milk, 200 c.c.; water, 200 c.c.

Dinner: Meat soup, 180 c.c.; beefsteak, 100 gm.; potato (baked, mashed or boiled), 130 gm.; green vegetables, as desired; two slices of bread (30 gm. each); butter, 20 gm.; tea, 180 c.c.; sugar, one teaspoonful; milk, 20 c.c.; water, 250 c.c.; pudding (tapioca or rice), 110 gm.

Supper: Two eggs, cooked in any style; two slices of bread (30 gm. each); butter, 20 gm.; tea, 180 c.c.; sugar, one teaspoonful; milk, 20 c.c.; fruit (stewed or fresh), one portion; water 300 c.c.

The findings of normal individuals are in part as follows after giving the renal test meal:

1. The six different collections of day urine have a variation in specific gravity of nine or

more points. Conversely, when this variation does not appear, the conclusion is that there is deficient kidney action and the less the variation the more involvement signified. This is an important deduction and is nicely explained in the table which follows.

SUMMARY OF SPECIFIC GRAVITY OBSERVATIONS IN NORMAL INDIVIDUALS¹³

Case	Maximum	Minimum	Difference
1.....	1.020	1.010	10
2.....	1.019	1.007	12
3.....	1.031	1.024	7
4.....	1.019	1.009	10
5.....	1.020	1.007	13
6.....	1.025	1.005	20
7.....	1.023	1.010	13
8.....	1.018	1.008	10
9.....	1.018	1.007	11
10.....	1.019	1.007	12
11.....	1.026	1.014	12
12.....	1.030	1.010	20

When kidneys do not show this variation in specific gravity the condition is spoken of as hyposthenuria, or loss of power of concentration, or a fixation of specific gravity (Chart III.)

2. The second important deduction is, that in normal individuals, the night urine is 400 c.c. or *less* in amount and its specific gravity 1.018 or over. Again, when the night urine is more than 400 c.c. in amount and its specific gravity less than 1.018, those facts are evidence, all other things being equal, that the action of the kidneys is impaired.

COMPARISON OF NIGHT AND DAY URINES IN NORMAL INDIVIDUALS

Case	Night Urine (12 hours)	Day Urine (12 hours)		
	Specific Gravity	Nitrogen Per Cent.	Volume c.c.	Volume c.c.
1.....	1.020	1.23	375	1,105
2.....	1.017	1.20	352	1,796
3.....	1.027	2.07	290	634
4.....	1.019	1.12	350	1,032
5.....	1.018	1.03	390	1,945
6.....	1.018	1.43	361	1,413
7.....	1.019	1.14	355	2,156
8.....	1.018	1.08	402	2,446
9.....	1.026	1.42	277	866
10.....	1.030	1.58	210	1,496
11.....	1.029	1.85	213	468
12.....	1.025	1.23	248	861

The nitrogen percentage, specific gravity and volume for the night urines of normal individuals on a nephritic test diet. Note the high percentage of nitrogen, high specific gravity and the small volume of urine, as compared to the day specimen.¹⁴

3. From the specified dietary it is known that the individual ingests 1,760 c.c. fluids, 8.5 gm.

13. Mosenthal: Loc. Cit.

14. Mosenthal: Loc. Cit., p. 740.

12. Mosenthal: Dietary, Loc. Cit.

salt, and 13.4 nitrogen. It is also known that normally the individual eliminates all but 400 c.c. of the fluids through the kidneys, all of the salt through the kidneys, and 90 per cent. of the nitrogen through the kidneys. Therefore, estimating the amount of fluids, salt and nitrogen eliminated after giving the test meal gives one an idea of how efficiently the kidneys are working.

It may be noted that the greatest variation of specific gravity in the day urine is 10, that the quantity of night urine is below 400 c.c. and that the specific gravity of the night urine is over 1.018. The output of water, 1,490 c.c., the elimination of salt, 17.72 gm., and nitrogen, 11.93 gm. are considered normal.

CASE 1.—A. B., male, farmer, aged 62 years. Outstanding symptoms: dyspnoea, wheezing, inability to lie on left side. Temperature, 97.8; pulse, 72. Blood pressure, 118, 78, 30.

REACTION TO NEPHRITIC TEST MEAL URINE

Time of Day	C.c.	Specific Gravity	Greatest Variation in Specific Gravity
8 to 10.....	130	1.012	..
10 to 12.....	120	1.023	16
12 to 2.....	120	1.027	..
2 to 4.....	75	1.024	..
4 to 6.....	60	1.019	..
6 to 8.....	115	1.028	..
Total day....	620	.....	..
Night, 8 to 8.	250	1.025	..
Total 24 hrs..	870	.....	..
Intake	1,760	.....	..
Balance	+890	.....	..

Albumin, none; casts, none; sugar, none. Diagnosis: emphysema; slight cardiac decompensation.

Case 1 shows the reaction of the kidneys to the test meal in a farmer, aged 62, whose condition is diagnosed as emphysema of lungs with slight cardiac decompensation. He shows a slight water retention eliminating only 870 of the 1,760 c.c. fluids ingested. This, no doubt, is due to the cardiac weakness, and not due to any lesion in the kidney. For, applying the deductions referred to above, we note that the maximum variation in the specific gravity of the day urine is 16, that the night urine is less than 400 c.c., and of a specific gravity higher than 1.018.

CASE 2.—J. M., male, farmer, aged 64 years. Outstanding symptoms: two apoplectic strokes, one, six years ago; the other three and one-half years ago. Recovery after first; thick speech and weak right arm ever since second. Mucous in throat, pupils almost pin point, right more so than left, dilating a little in dark. Patient weak, in bed most of time. Temperature, normal; pulse, 80 to 90 regular. Blood pressure, 260, 130, 130.

REACTION TO NEPHRITIC TEST MEAL URINE

Time Day	C.c.	Specific Gravity	Greatest Variation in Specific Gravity		
8 to 10.	108	1.011	..		
10 to 12.	75	1.012	2		
12 to 2.	75	1.011	..		
2 to 4.	90	1.012	..		
4 to 6.	85	1.010	..		
6 to 8.	30	1.010	Sod. Chlor.	Nitrogen (Urea)	
				Per Cent	Gm.
Total Day	463	.....	Diminished	1.1	5.0
Night, 8-8	625	1.009	Normal	1.2	7.5
Total,					
24 hours.	1,088	.....	....	..	12.5
Intake ..	1,760	.....	....	..	...
Balance .	+672	.....	....	..	...

Albumin present, 0.25 per cent.; granular casts; sugar, none. Diagnosis: hyperpiesia and sequelae. Patient died April 1, 1919.

Case 2 shows the reaction of the renal function test meal in the condition of a farmer, who is the subject of chronic hypertensive cardiovascular disease, or hyperpiesia. In addition to the physical findings indicated on the chart, he had a markedly hypertrophied heart, the left border of cardiac dullness extending much beyond the left mamillary line. The most significant findings with respect to the kidney function are the very low variation in specific gravity of the day urine, 2; low specific gravity of all of the day urine; a night urine exceeding 400 c.c. and of a low specific gravity, 1.009. Granular casts were found; and albumin, in small percentage, has been found for at least a year. I take all these facts to mean that this patient had a real kidney lesion, but that it was a lesion following, as an end-complication of hyperpiesia. That such conditions occur is held by Mosenthal,¹⁵ "Here, therefore, we have the third of the common sequelae of essential hypertension, the others being, as we have seen, sclerotic changes in the aorta and in the cerebral vessels." The "third of the common sequelae" to which Dr. Mosenthal refers, is vascular changes in the kidney. Case 2 died April 1, 1919, being unconscious for about thirty-six hours, without any nervousness or twitching nor any convulsions; but by a gradual failing of his powers of speech and articulation and a failing of his power of respiration, his respiration becoming more labored and slower until the end, the pulse, eight hours before death, being about 90, regular and full. I do not know whether we could say this man died of uremia.

CASE 3.—R. M., male, aged 19 years. Clerked in store for nine years. Important findings; looks very anaemic. Temperature, 99; pulse, 100. Blood pressure, 142, 108, 34. Blood

15. Mosenthal: Essential Hypertension, Med. Clin. of North America, Vol. 1, p. 117 (July) 1917.

hemoglobin, 55 per cent.; white count, 15,000; red count, 2,250,000. Differential count lymphocytes (large and small), 35 per cent.; polymorphonuclear, 61 per cent.; eosinophil, 2 per cent.; transitional, 1 per cent.; basophil, one cell. Urine, phthalein test, 4 per cent. in two hours; (intramuscular) normal, 85 per cent. in two hours.

REACTION TO NEPHRITIC TEST MEAL

Time	Specific	Maximum in		
Day	C.c.	Gravity	Specific Gravity	Variation
8 to 10.	175	1.008	2	...
10 to 12.	150	1.009	..	...
12 to 2.	160	1.009	..	...
2 to 4.	155	1.010	..	...
4 to 6.	165	1.010	..	...
6 to 8.	170	1.008	Sod. Chlor.	Nitrogen (Urea)
				Per Cent. Gm.
Total Day	975	.....	Diminished	1 9.75
Night, 8-8	750	1.007	Diminished	% 6.75
Total,				
24 hours.	1,725	.....	....	.. ...
Intake ..	1,760	.....	....	.. ...
Balance .	+35	.....	....	.. ...

Albumin, 2 per cent.; granular casts; round epithelial cells; few pus cells; few red blood cells. Diagnosis: chronic parenchymatous nephritis, secondary anemia. Patient died March 26, 1919, in uremic coma; coma lasted eight hours, preceded by highly nervous state with twitching of muscles.

Case 3 shows some very interesting facts. It was diagnosticated an anaemic, secondary to chronic parenchymatous nephritis. Even though these kidneys were in this serious condition, they nevertheless had the power to eliminate water. This patient was not markedly dropsical, though he had some slight edema about the ankles and face. But again, the night urine exceeding 400 c.c., and being of low specific gravity, 1.007, and the fixation of the specific gravity of the day urine, 2, and the day urine being constantly of low specific gravity, all bespeak the serious involvement of the kidneys.

In connection with the report of this case, it must be emphasized how valuable the phthalein test may become as a prognostic measure. The elimination was only 4 per cent. in two hours and ten minutes; normally, it should be 85 per cent. This patient died nine days after this test was done. He died in uremic coma lasting about eight hours, previous to which time patient was very nervous with twitching of muscles. I feel that the phthalein test more than any other revealed the seriousness of this case and forecast the approaching end. Geraghty and Rountree¹⁶ report similar cases.

However, let me say in conclusion, that I do not hold that the kidney function tests are the final word in the diagnosis of cardiac, vascular and renal conditions; I hold that the information gained by these methods is most valuable, and that it must be "figured in" with the other evidence at hand in order to work out the final conclusion.

To further support the view of the value and practicability of the renal test meal and phthalein test let me quote the following: "It is extremely desirable to insist on the fact that, since the food as found in most households suffices to carry out these tests and the procedure is not a complicated one, it need not be confined to hospitals and patients who can afford private nurses."¹⁷

"Thorough study of these methods is daily advancing our knowledge of renal function, and, fortunately, we have already learned a few very simple and highly satisfactory tests that meet the practical requirements of yielding the maximum amount of information from the minimum amount of time and trouble. The two methods that have measured up best to this rough practical standard are the phenolsulphonaphthalein test and the study of the quantitative urinary output and its specific gravity."¹⁸

DISCUSSION OF BONN-WISHARD-MC COWN-YODER PAPERS

DR. WILLIAM S. EHRICH, Evansville: Dr. Wishard has laid special stress on the preparation of the patient for prostatectomy. I believe that thorough preparation is absolutely the most important element for success in prostatic surgery.

I am very fond of the indwelling catheter, when it is comfortably tolerated it provides a clean as well as a perfect drainage. In cases which are intolerant and in badly infected cases which do not clean up under catheter drainage the two-stage operation solves the problem. The advantage of this operation in the cases suitable for catheter drainage is negligible since it subjects the patient to two operations, whereas the opening of the bladder is at most only the matter of a few minutes. In cases that have a large amount of clear, sterile urine I think it well to infect as a preoperative precaution. This is easily done by introducing the urethral organisms by means of a retained catheter. The patient establishes an immunity to the infection and is later spared the shock of infection plus the shock of the operation.

In examining the patient the use of the cystoscope is most important and every surgeon

16. Geraghty and Rowntree: J. A. M. A., Vol. 58, p. 811 (Sept. 2) 1911.

17. Mosenthal: Loc. Cit.

18. Hamman: Loc. Cit.

who operates on a prostate should familiarize himself with the interior of the bladder.

Dr. Wishard's mortality is a subject for congratulation.

Dr. McCown spoke of the use of santal oil. I find that it is almost diagnostic in cases of renal tuberculosis that the administration of urotropin causes decided irritation while santal oil relieves.

Another point the doctor brought out was the fact of the sound kidney giving trouble. I know of two cases in which the sound kidney was subjected to operation.

I have seen very good results from the use of the tubercle bacillus vaccine of von Ruck.

Dr. Yoder mentioned standards in the phthalein test. I think there can be no hard and fast standard in this test. Each patient is his own standard. The ideal method is to make a blood urea and phthalein test at the same time and from that make your standard for the patient. If the kidneys show that they will regenerate under proper conditions it makes little difference what amount they originally threw off, while if the amount of phthalein remains the same the case is not an operative risk even though the amount originally was fair.

DR. FRANK H. JETT, Terre Haute: A few years ago I wrote a paper on early prostatectomy, and while it was a very timid attempt, I really think yet it is the keynote of prostatic surgery. All you hear talked about today is getting your patient able to stand an operation. Your gallbladder cases are not in the shape you find your prostate cases and appendix cases. Why is it? They have been taught that they need an operation and need it at once. I think a great deal of it is due to the high mortality after late operating. You will find the mortality varies according to whether or not it is emergency surgery. In a small locality where the patient is sent to the hospital to let you do what you can at the last minute, the mortality is of course high. This applies to appendix as well as prostate.

I am surprised to hear Dr. Wishard is doing all his work suprapubic. I do not think there is any branch of surgery that depends more on a man's fingers than prostatic surgery, and, candidly, I would rather have Dr. Wishard take out my prostate through a finger incision than have most men operate with a free opening of the bladder. In adenoma, it is a question of keeping the finger in the line of cleavage. This is not done by sight but by finger education.

When you talk about prostatic hypertrophy, you do not say anything. I have seen a little adenoma as big as the end of my finger that caused complete obstruction and nothing could be passed for weeks. I think we should do away with the term prostatic hypertrophy. It is prostatic obstruction. In a large percentage of cases, it is prostatic adenoma. Where these

adenomae have their origin, I do not know. It is quite possible that we may find that they start from the small urethral glands. However, I am convinced as to what happens in prostatic adenoma after it does start. It grows, compressing the prostate and assuming the form of the prostate, until it fills this space and then overflows into the bladder just as the cake does when baked in a small tin. The compressed prostate is your surgical capsule and the adenoma is molded into the form of a prostate. Prostatic adenomae have been removed the second time several years after previous operation, and when specimens were compared, they were quite alike. Now, you speak of one thing, and when you talk about a fibrous prostate, you are speaking of an entirely different affair.

The question of whether to do the operation above or below, I think, is a question of experience. I predict a time when the ordinary early prostatic obstruction will be done with one finger, before you have the contracted bladder and kidneys which are killed, for then you are working on a man instead of a derelict. To show that I am not partial to the perineal method, I do my few cases suprapubic, but wish I were skilled enough to do at least some of them by the perineal route.

Dr. McCown said the early urine in tuberculosis did not show much. I think the early urine is one of the most valuable things you can put your fingers on. A very irritable bladder with sterile acid urine should cause a suspicion of tuberculosis whenever it is found, and this should not be excluded until the case has been completely tested out.

The number of kidney function tests suggests very strongly that there are "too many remedies for one disease." Most diseases and tests have gone through this stage. The urine has been made the goat in medicine for centuries. Medical men have divined all sorts of things from simply looking at urine. Max Broedel, in "Serial Sections and Measurements of the Kidneys," gives us some idea of what we are dealing with when we test kidneys. According to him, there are 4,000,000 tubules and glomeruli in the two kidneys. Were these tubules to be placed end to end they would aggregate about 75 miles in length. If this calculation be correct, each tubule would secrete only between 8 and 10 c.c. of urine in a whole lifetime of seventy years. The truth of the matter is the kidneys are most times a part of a general condition. These so-called deaths are divided into three: anuria, uremia and loss of kidney function. If some one here knows what causes anuria I would like him to tell us. What causes 4,000,000 tubules and glomeruli to go on a strike at once? Certainly the 4,000,000 tubules have some union to quit work at the same time, and it is beyond me to think how the kidneys can engineer this affair.

Many times postmortem anuria and uremia give us no kidney pathology. We can tie both ureters, still the patient does not die of uremia. Patients die of uremia with a moderate excretion of urine. Again, we are confronted with the fact that uremia is still beyond us and does not wholly depend on what we find by our so-called kidney function tests. To say that the patient dies of loss of kidney function is to say simply that we do not know what the cause of death is.

Do not understand me that I would throw these tests away, for liberally interpreted and coupled with the general examination of the patient as to his general condition, they are of value. The test meal spoken about requires rigid checking to get the right conclusion. Undoubtedly, the simplest test and one of the most valuable is the kidney fixation test. That is, water starvation for twelve hours so as to get the gravity up as high as 1.030 and even higher. A glass of carbonated water every half hour for four hours will run the gravity down to 1.000 or just a little higher. If the urine under this test stays between 1.010 and 1.018, you undoubtedly have a kidney that is working at capacity, or at least a kidney that will not stand much foolishness. It is no wonder that renal function tests are not perfect, for we are dealing with physiologic chemistry, one of the most difficult branches of medicine. It is my opinion that if we make kidney function simply a part of a very rigid physical examination, we will get better results.

DR. WILLIAM WISHARD, Indianapolis: I regret very much that my difficulty in hearing prevented my following the papers of Drs. Bonn, McCown and Yoder. I am sure I shall read them with great pleasure and profit.

In reference to the matter of preliminary drainage, whether it should be by catheter or by the two-stage operation, I cannot altogether agree with my friend, Dr. Ehrich, in reference to that. I am sure that of the 120 cases we report this afternoon as having been operated since we had the privilege of presenting this subject to this society two years ago, we would have lost more than two if we had done catheter drainage alone. The question also of the difficulty of maintaining catheter drainage and of its impossibility in some cases must be taken into consideration; also the question of complications. Catheter drainage is invaluable. I use it invariably. The point is whether it shall be depended on wholly as preliminary to prostatic operation. I believe very sincerely that in the majority of cases there should be a preliminary cystotomy. Eight of the 120 cases we report this afternoon were given preliminary drainage. As you are aware, it is not the size nor the shape of the prostate that is the provoking factor in producing prostatic cystitis. I have in mind a case that I operated some two or three years ago

in which there was continuous bladder irritability, constant partial retention of urine, constant symptoms of marked degree, where there was a prostatic enlargement only one-sixteenth inch in diameter and not more than one-half inch in length. It is possible for a prostate of great size surrounding the neck of the bladder, which may not impinge on the urethral or bladder space, to occasion no retention of urine. This very fact that there is a variation in size has a practical relation to the question of successful catheter drainage prior to operation. Because, if I may go on and illustrate a little further, some of these larger prostates the majority of which have encroached on the urethral and bladder space, are somewhat nodular in shape, they vary in degree of congestion from time to time, the canal is irregular, and the presence of the catheter is provocative of discomfort and you cannot get them to wear the catheter all the time. I am very sure that quite a considerable number of this group we have reported would have declined to persist in the use of the catheter. The morale of these cases is profoundly influenced by the comparatively harmless procedure of a preliminary cystotomy which accomplishes absolutely complete functional rest. I believe in catheter drainage. I do not wish to be misunderstood on that. It is very useful, but has its limitations.

Another point that has not been brought out is the question of the diagnostic value of the cystoscope. The cystoscope, like the catheter, is of constant value in the study of prostatic cases, but there are from time to time, as you know, certain cases where by the cystoscope you cannot learn fully the conditions within the bladder. Its mechanism is pretty well standardized, but with all the improvements that have been made in the cystoscope in the last ten or fifteen years I do not think anyone has replaced the cystoscope suggested by the late Dr. Will Otis of New York some twenty years ago. Not long ago I opened a bladder where I had used the cystoscope carefully and was quite sure of my findings, and on putting my finger into the bladder I found what appeared to be a rather large prostatic growth, somewhat pear-shaped, and having a very deep postprostatic pouch. This is one type of cases we run across every once in a while where the cystoscope is not always to be depended on for the determination of local conditions within the bladder. The cystoscope showed this growth on its urethral aspect to be sharp and nodular and projecting into the urethra, and it gave a pretty good idea of the mechanical condition and also of the appearance of the bladder. After draining him for some days by a catheter a suprapubic cystotomy was made, and on putting my finger into the bladder I found what I could not have discovered with the ordinary cystoscope, a large stone deep in the postprostatic pouch, which I might have dis-

covered had I used the old-fashioned retrograde cystoscope of Dr. Otis, by which you can get a back view. A radiogram would probably have revealed the stone in this case. The cystoscope, however, is usually sufficient to give us a very excellent idea of the mechanical conditions existing in the bladder, of the condition of the bladder wall, the appearance of the ureteral orifice, the presence of diverticuli, and stones or other complications so often present.

Dr. Jett referred to the various operations that have been done on the prostate, and I think he did a service in calling attention to the fact that we must not always be talking about doing a prostatectomy, but rather about making a thorough diagnosis and doing the best thing for our patient, considering the condition existing in the prostate. Careful drainage, attention to the innumerable complications that from time to time arise, careful judgment and decision at the right time to operate and whether to do a primary prostatectomy or two-stage operation; these are the things that are of importance both to the patient and to the physician.

I think it is especially timely that Dr. Yoder read his paper on functional renal tests. If I remember aright this is only the second time that this subject has been fully presented to the profession here, the first time by Dr. Geraghty of Baltimore about four years ago. If we could get a chart showing the curve of a kidney function test in all these cases of infection of the bladder, ureters and kidneys from prostatic obstruction, showing how low that curve will go when they have for a long time been infected, and how steadily and uniformly in a large proportion of cases it will rise where drainage, either by catheter or by suprapubic drainage has been induced, and where the patient's general condition has been looked after—if we could always study carefully this part of our clinical history it would be very helpful because it is of practical and very great importance.

DR. BERNHARD ERDMAN, Indianapolis: It is always extremely interesting in the discussion of any pathologic problem to have a gross specimen of the subject under discussion. I know the presentation of this specimen will interest you because the woman was one of the most interesting cases that has come under my observation. I saw her first in the summer of 1917, at which time she was passing a rather large amount of cloudy urine which contained considerable pus. This urine, repeatedly examined, never showed any tubercle bacilli. She had no temperature. Inoculation of this urine into guinea-pigs gave us no response. In cystoscoping her it was utterly impossible to find the orifice of her left ureter. We were able to find the right orifice and passed a catheter up this possibly 3 or 4 cm. Subsequently we attempted to pyelogram this side, and we could see, with the patient lying on the table, the sodium iodid

solution which we used at that time forced into the bladder up to this point and then reflow back into the bladder. The left kidney, as you can see, is nothing but a hypernephritic sac. There was complete obstruction of this ureter about 2.5 to 3 inches above the bladder. The right kidney is large and tuberculous with an enormously thickened ureter and which must have been present over a considerable period of time. The hyperplasia which has taken place in this kidney is well illustrated. This is only a little more than half of it, but I feel sure it brings out some very well marked points.

Another interesting feature is that the woman went into the hospital where she remained in her last acute illness of a little more than four weeks, running for the last fourteen or fifteen days a subnormal temperature, with just a little acceleration of the pulse, and a gradually diminishing output of urine from over 60 ounces down to practically nothing the day before her death. It is also interesting to mention that in the upper lobe of her left lung she had one small cavity of active tuberculosis, possibly 0.75 inch in diameter, and that both upper lobes showed a healed lesion. There is no history of tuberculosis in the family, one sister dying of cancer at 44. This case is interesting from the size of the kidney and particularly the length of time the patient lived with all her multiple troubles.

DR. CHARLES P. EMERSON, Indianapolis: I think this is the most interesting single session I have attended. Not that the subjects have been especially interesting, but that they have been discussed in an extremely thorough manner. We now want to go home and do better work than before.

The question of tuberculosis of the kidney is extremely interesting. Why is it that internists find it so seldom in all the cases of tuberculosis we see, granting that about one in ten tuberculous cases have at least a slight grade of tuberculosis? Our rule should be that any case of unexplained polyuria, any case of unexplained hematuria, any case of unexplained frequent urination, if other symptoms also are present, should suggest the possibility of renal infection by tuberculosis. It is interesting that formerly we recommend to each case of pulmonary tuberculosis "meat, milk, eggs; meat, milk, eggs, and more of it!" And it was only when we found that this diet of milk, meat, eggs might overtax an infected kidney that we stopped the meat and egg part of that treatment.

I am sure Dr. McCown will agree with me that it is not such an easy thing to recognize *Bacillus tuberculosis* in the urine. But if the specimens are obtained by clean catheterization and with particular care to avoid contamination then those specimens in which we find acid fast bacilli will indicate tuberculosis.

There is another thing which must be borne in mind, that in many cases of pulmonary tuberculosis you can find *B. tuberculosis* in the urine, and yet the chances are that not many of these cases have tuberculosis of the kidney. I can not agree that a normal kidney will allow an organism to pass through its epithelium and remain a normal kidney, although I grant you that a few hours afterward it may return to normal.

I am interested in what Dr. Yoder says about renal functional tests. The examination of the urine as an important aid to diagnosis dates back something like 2,000 years. If it were not for this long history of urology as an over-important means of diagnosis it might be easier now to evaluate that subject. The quacks of the Middle Ages based their diagnosis on the examination of the urine alone, and there are plenty today who are repeating this mistake. Indeed, the most of urine examination is of little value. At the meeting of the American Medical Association in Portland in 1904, several of the best men emphasized the fact that there is no disease of the kidney alone. That which we call disease of the kidney is only part of a larger disease of the body. The kidney is the filter of the body and therefore is in the path of infection from other parts of the body. In the course of the disease we call nephritis are many periods during which the urine is normal. The kidney is infected because there is a starting point of the disease beyond the kidney.

The important point is the accuracy of these renal tests. I would rather trust the ophthalmoscope as to the condition of the kidneys than many elaborate renal tests. The kidney test meal as shown here has its strong points. In a good clinic where you have nurses and interns at your command you may get a great deal of benefit from it, but in general practice this test may lead to some confusion. Why? Because there are so many factors which can confuse the picture. Therefore these tests are of especial value in clinics where the many elements can be controlled.

DR. J. C. FLEMING, Elkhart: I only care to discuss one paper, and that is the paper on prostatectomy. I think it is a fact that the fatalities that follow prostatectomy can be divided into three classes:

1. The cases of malignancy, where a man attempts to take out a malignant prostate. I want to ask the essayist what he does when he goes in and finds what he considers evidence of malignancy, what procedure he follows? Also on what evidence he bases his diagnosis of malignancy? What things in his findings suggest malignancy after he has opened the bladder and has the prostate before him?

Next I want to ask why the discrepancy between the pathologist's statistics and the genito-urinary surgeon's statistics? The pathologist

tells us that from 5 per cent. to 10 per cent. and even as high as 20 per cent. are malignant. If that be true there must be a great many removed that are malignant, but we know that malignancy nearly always involves the capsule, and these cases that are so obviously malignant are very difficult to remove.

2. In regard to hemorrhage, Dr. Hugh Cabot made the statement four or five years ago in Chicago that 15 per cent. of the cases that died following prostatectomy died from hemorrhage. I want to ask the essayist what procedure he adopts to prevent hemorrhage?

3. I think the reason some of these cases die following prostatectomy is because we do not wait long enough for the case to clear up after they have had their preliminary drainage. I believe a bad case should be allowed to go home and wait even a few weeks or months and then have the prostate out.

DR. P. E. McCOWN: I do not have much to say about my own paper, but I am much interested in Dr. Wishard's report. I confine myself to the suprapubic prostatectomy. I cannot agree with Dr. Jett as to the perineal prostatectomy because it is undoubtedly a greater shock to the patient, be he weak or strong, than a suprapubic, for cutting into the perineum is a very serious matter. When I changed from the perineal prostatectomy to the suprapubic Dr. Cabalzer, who had been giving anesthetics for me, remarked that the patients were getting off the table in better condition. There had been no more preparation, so I felt that they were receiving less shock from the suprapubic than from the perineal prostatectomy. Dr. Young of Baltimore is still doing perineal prostatectomy, but the men who have been in his clinic (and some of them have been extremely successful since they left him) are now doing the suprapubic operation. In doing a perineal prostatectomy you have to tear up a considerable amount of the urethra and you are subjecting your patient to stricture, to perineal fistula, rectal fistula, complications that never happen any more from a suprapubic prostatectomy.

As to the renal functional tests, I think the pendulum is swinging the other way. Twenty or thirty years ago the physician did not have these scientific tests and he had to depend on his general observation of the patient's condition. I do not think we should lose sight of this and depend altogether on the scientific tests. A very satisfactory sign in preparing a man for prostatectomy is that he has a good appetite, his food tastes good to him, and he sleeps well. If a man feels good he is generally in pretty good condition. He should of course show good tests. Tests are an aid, but I do not believe we should depend on them altogether.

As to catheter drainage cases, when a prostatetic comes to you with back pressure on his

kidneys which are damaged from infection, you put him in a hospital and do a suprapubic cystotomy and suddenly release that pressure. This is a very dangerous thing. How are you going to put that pressure back? It cannot be done with a hole in his bladder. So I believe we should first give these patients catheter drainage and allow the kidneys to come down to a certain point, and if our patient then becomes uremic we can put the pressure back. I think we should be guided more by the condition of the patient. With a patient 55 years of age whose kidneys are damaged moderately I put him on catheter drainage, let him come down town and go to a movie. But there are cases where you will have to do a suprapubic cystotomy because the patient cannot be drained with a catheter, and this means that he is usually confined to the hospital, which is disagreeable.

When urine is acid on reaction, when there is a small amount of albumin with bladder irritation, when it is sterile on culture, it should be investigated for the tubercle bacillus. The first test is not enough. It should be investigated repeatedly. Dr. Spitzler of Denver, in his investigation of 124 cases of renal tuberculosis, found five cases that showed the tubercle bacillus in the urine without any irritation, so I think it will be shown that the kidneys will eliminate the tubercle bacillus without being very badly damaged.

DR. WILLIAM N. WISHARD: As to the control of hemorrhage, I wish to say that in the first place the wound should be treated like any other in the control of hemorrhage. The bladder should be opened freely, and after emptying it carefully, catching and clamping the bleeding points and tying them off has much to do with the prevention of hemorrhage. As a safeguard after operation it is very desirable to exercise some sort of direct, well regulated pressure. That can be done by gauze packing (if necessary soaking the gauze in adrenal solution), or it can be done by the implantation of fat, or by the use of the Hagner bag held in place by Dr. Hamer's device referred to in the paper this afternoon. A description of this device has been published in *The Journal of the American Medical Association* and elsewhere, and consists of a wire frame resting on the pelvis in front, the placing of the Hagner bag in position (after all the bleeding seems under control) by bringing the long end of the tube out through the urethra and after the bag is dilated fastening the anchor tube by a clamp to this wire frame. The pressure can be regulated as desired in that way. We occasionally have a little secondary or delayed hemorrhage occur, and for that reason it is desirable to have an ample opening, and if it is necessary later on to go into the bladder you can use gauze, or clamping, or pressure, or whatever means may in the particular case seem to be desirable.

ORIGINAL ARTICLES

REPORT OF CASE OF EPIDEMIC ENCEPHALITIS

C. E. GILLILAND, M.D.
TERRE HAUTE, IND.

The following case is reported in order to call attention to the fact that the disease, epidemic encephalitis (encephalitis lethargica), is still prevalent, and because of its contagious character and the desirability of the recognition of more of these cases in order that further observation on etiology, pathology, symptomatology and treatment may be made. The high mortality rate, approximately 50 per cent., makes this a distinctly serious condition. It is hoped that the physician generally throughout the state will be on the alert for this disease.¹

CASE 1.—S. W., Dec. 1, 1919, Hungarian, aged 39, married, grocery storekeeper.

Complaint not very definite. Complained of some pain in top of head and some kind of a cold two or three weeks previously.

Family History.—Father had asthma. Otherwise negative.

Marital History.—Patient has two children. One 12 years old and one 10 years and wife was pregnant at the time of patient's illness. Apparently there had been no trouble with miscarriages.

Past History.—Pneumonia at age of 27 with a relapse but recovery evidently complete. Typhoid fever at the age of 19; hair came out; recovery complete. Influenza in fall of 1918. Patient often had tonsillitis. At about the age of 19 there was a penile ulcer and patient was told at that time that he had syphilis, and he took a small amount of treatment but evidently insufficient. There were no eruptions on the body at that time.

Present Illness.—About three weeks previously patient took some kind of a cold. It was impossible to get a clear idea as to what this might have been. At time patient was seen there was no cough and no soreness in the chest; throat not sore. Patient had some kind of trouble in the right ear, but not attended by pain. Patient said there was some pain in the top of the head but it was not severe. Patient had always been well until the onset of the present trouble. Appetite poor. Sleep poor. Bowels constipated.

Physical Examination.—Temperature 97.5, pulse 81, respiration 18. Patient's general physical condition good. Skin showed a definite pallor. No adenopathy. Head negative except tonsils which were enlarged and from which whitish purulent like material could be pressed. It appeared that patient must have had a peritonsillar abscess probably two weeks earlier. Lungs

1. The reader is referred to the Quarterly Cumulative Index of the American Medical Association for a fuller bibliography; a few references to splendid articles in the *Journal of the American Medical Association* are given below: Encephalitis Lethargica. Portier, O. L.: *J. A. M. A.* 72:715, March 8, 1919; Special Article, *ibid.* 72:794, March 15, 1919. Bassoe, Peter: *Ibid.* 72:971, April 5, 1919. Ely, Frank A.: *Ibid.* 72:985, April 5, 1919. Wedgeforth, P., and Ayer, J. B.: *Ibid.* 73:5, July 5, 1915, or epidemic somnolence, Tucker, B. R.: *Ibid.* 72:1448, May 17, 1919.

—some flattening of the right upper thorax anteriorly but evidently old. Otherwise lungs were negative. Heart negative. Small external hemorrhoid.

Neurologic Examination.—Patient's enunciation was not distinct. He seemed dull mentally but this did not seem to be his normal condition. Patient said that he previously talked rapidly and with vigor. Eyes—pupils reacted promptly to light and to accommodation. Some incoordination of the upper extremities with finger to finger test was present. The biceps and periosteal reflexes of the forearm were increased. The knee kicks were considerably increased. Romberg test negative.

Blood Examination.—Hemoglobin 80 per cent. +. Leukocytes 9,320. Differential not abnormal. Blood Wassermann negative. Urine not obtainable at this time. Blood pressure 130 systolic and 95 diastolic.

No definite diagnosis was made at this time, but patient's condition was suspected to be due to syphilis of the central nervous system.

Patient seen again December 6 and some further history obtained. Patient said that his memory was not very good. He thought there was something wrong in his head. The head did not pain at this time, and throat was not sore. Patient was advised to have a lumbar puncture. Patient was not seen then for eleven days during which time a tonsillectomy had been done by another physician and the throat seemed to be healing well. On December 17 patient again was advised to have lumbar puncture. There was very little change in his general condition except that he was possibly somewhat weaker. At this time it was noted that the patient had a speech defect simulating a motor aphasia. He evidently knew what he wished to say but was unable to speak it. The patient was confined to the bed after this time. December 18 lumbar puncture showed spinal fluid not under increased pressure; 5 c.c. was withdrawn. No blood in the fluid. Cell count 1 per cm., a lymphocyte. No blood cells. Ross Jones ammonium sulphate globulin test negative. Wassermann on the spinal fluid negative. Urine examination negative.

On December 19 the right pupil was slightly larger than the left. The left side of face moved more in speaking than the right side, and the left side of face was moved when patient gripped an object whereas the right side of the face was immovable. There was possibly some weakness in the right hand. Tongue protruded in mid line, but on two occasions it went over to the left side after being protruded. Patient's slow enunciation was again noticed and also the difficulty in expressing himself.

The patient at this time was seen in consultation by Dr. Bayard Holmes of Chicago, and he agreed that the case was probably one of encephalitis lethargica. Other conditions which were to be considered were: central nervous sys-

tem syphilis, brain tumor and brain abscess, and dementia. After the laboratory reports were rendered on the spinal fluid, a definite diagnosis of epidemic encephalitis was made.

The chief eye findings were: right pupil larger than left; homonymous diplopia. The fundus showed small retinal hemorrhages, veins swollen, choked disc. Patient spoke of seeing two objects in the place of one; this began December 19 and lasted only a few days.

December 22, patient apparently had very little, if any, reaction from the spinal puncture. December 23, right pupil slightly larger than left. No diplopia. Patient was somewhat brighter and laughed occasionally but still confined to bed. Constipation still present. At this time patient complained of severe headaches at times which were not relieved by aspirin. Reflexes, biceps and periosteal of the upper extremity increased. Triceps not increased. Reflexes were the same on the two sides. The upper and lower abdominal reflexes were present on the left but absent on the right in upper and lower. No patella or ankle clonus nor Babinski, Oppenheim or Gordon. Achilles tendon reflexes were present but not very active. Plantar reflexes were fairly active. Tongue protruded in mid line. Grip in right hand distinctly weaker. Left side of face stronger than right. Nasolabial fold on the right was absent. Leukocytes 8,200.

December 29 patient's condition was not much changed except that he was somewhat weaker. The right arm was distinctly weaker than the left and patient complained that at times he was scarcely able to move the right arm. Patient's disturbance of speech continued the same if not somewhat worse. Constipation continued.

Jan. 2, 1920, patient slightly comatose; was unable to speak. Reflexes practically the same as before. Both arms were very weak particularly the right. Some vomiting for preceding twenty-four hours.

January 4 patient much brighter but otherwise no material change. Patient had some difficulty in swallowing.

January 11 patient's condition distinctly worse; comatose. Paralysis of the right arm was apparently complete. Patient died January 12. Autopsy not obtained.

The mouth temperature was not elevated at any time. No nystagmus was found. The patient's condition from the onset was one of lethargy, early fatigue from exercise, a slowly progressing debility. The speech defect, inability to find words or to articulate them, was very striking. The disease was indeed attended by a unique symptomatology.

318 McKeen Block, 672 Wabash Avenue.

A CASE OF PRIMARY PNEUMOCOCCUS PERITONITIS

THOS. B. NOBLE, M.D.

AND

SCOTT R. EDWARDS, M.D.

INDIANAPOLIS

Case 2132. Female. Baby D. American birth, age 8, fair skin and light hair. Fairly well nourished. Admitted to the hospital 12:30 p. m., April 27, 1919, diagnosis of acute appendicitis.

Family History: Father living and well, mother died comparatively a young woman, cause unknown. The patient was one of four children, all said to be well.

Past Personal History: Mumps with good recovery. Recurring attacks of stomach pain, said to be bilious attacks, which always cleared up promptly with cathartics.

Present Illness (obtained from the child's aunt): March 25, 1919, came home from school complaining of pain in the region of the umbilicus. Refused food and went to bed. The pain continued the following day after a fairly comfortable night. A purge was given with good results and seemed to relieve the pain. On admission to the hospital, the child presented symptoms of serious distress. Her face was pale, sunken, pinched and anxious. The pulse was rapid, small and wiry. Her position was suggestive. The legs were drawn up, more particularly the right, and the arms held high on the chest. The abdomen was very tense and extremely painful on touch. The rigidity seemed more marked on the right side. A white blood count showed 24,000 cells per cm., 88 per cent. polymorphonuclear leukocytes. Urine showed an acute parenchymatous nephritis.

The admittance diagnosis of appendicitis was confirmed, and operation done immediately under ether anesthesia.

A McBurney incision was made over the appendix. On going through the peritoneum an opaque free fluid was encountered absolutely odorless. The head of the colon and appendix were easily found, and it was possible to bring the appendix well up through the incision. Very much to our surprise it presented very little acute pathology. There was evidence of old trouble, namely a thickening of the viscus and periappendicular adhesion, but no evidence of the acute condition. After appendectomy was completed, the small bowel was pulled up through the incision at least a meter proximal to the caecum. These coils lay well down in the pelvis. They were covered with a thick fibrous exudate, at least a millimeter in thick-

ness, and of a dirty white appearance. The exudate could be stripped from the bowel and left a highly hyperemic area which oozed slightly. A thorough search was made for a diverticulum or some other pathology to which the primary condition could be traced. There was absolutely nothing else to be found throughout the entire peritoneal cavity.

Material for cultures was taken and the incision closed with a $\frac{1}{4}$ inch para rubber tube cut spirally left for drainage.

The postoperative treatment consisted of morphine sulphate, $\frac{1}{8}$ grain, according to the occasion, Fowler's position and proctoclysis of bicarbonate, 2 per cent., glucose, 2 per cent. in normal salt.

On the evening following, there was slight encouragement. The temperature dropped from 105 ax to 101 ax, with a corresponding drop in pulse rate. But by midnight the pulse began growing weaker and more rapid, the abdominal distention was quite marked and the skin cold and clammy. Vomiting of small quantities of watery material was continued until death occurred at 3 a. m. Postmortem was refused.

Bacteriological examination of debris taken from the abdomen showed a pure culture of a gram positive lancet-shaped diplococcus, with slight tendency to chain formation, which grew in small dew-drop like colonies. Agglutination against U. S. Public Health pneumococcic sera showed it to be a type 1 pneumococcus. It is a significant fact, that an organism corresponding, in morphological, cultural and serological properties was also found in scrapings from the appendiceal mucosa.

The diagnosis of primary pneumococcic peritonitis is an extremely difficult differential problem. In children, it generally very closely resembles appendicitis. In older cases the clinical picture will depend largely on the virulence of the organism, whether the infection becomes circumscribed or diffuse. There is always a marked leukocytosis with the increase largely of the polynuclear type. And the objective symptoms of general infection—apathy, weak heart, occasional dyspnea and dry tongue. The mentality generally remains clear.

If the condition is suspected it may be possible to rapidly verify it by the precipitin reaction in the urine against specific pneumococci serum.

The prognosis in the circumscribed form of pneumococci peritonitis if drained at the proper time is excellent.

In the primary diffuse form the prognosis in most cases is early death, depending somewhat on the acuteness of onset, severity of symptoms and degree of prostration.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

APRIL 15, 1920

EDITORIALS

THE TREATMENT OF DIPHTHERIA

During the past few weeks Indiana has been suffering from a rather severe epidemic of diphtheria. In view of the fact that the causation and methods of control are well understood by all health authorities it seems strange that the disease should have been so prevalent this winter, and the mortality rate so pronounced. We are strongly of the belief, so forcibly expressed by the New York City Board of Health, that a death rate from diphtheria is due to neglect on the part of parents in failing to call a doctor soon enough, or if a doctor has been called early he has failed either to make a proper diagnosis or to administer antitoxin early enough or in sufficient doses. We also are inclined to believe the statement made by a prominent sanitarian that a death from diphtheria should be considered just as unnecessary as a death from typhoid fever, inasmuch as both are unnecessary and represent what is in effect a sanitary crime.

Every well organized health department can use the Schick test for the recognition of susceptibles, and for those exposed to or sick with the disease there is antitoxin which should be used promptly and in accordance with established rules of procedure in such instances. In view of a knowledge of what amounts to criminal negligence and incompetency in the treatment of so many cases of diphtheria coming to the notice of Indiana health officers, we are disposed to hold the medical profession responsible for the mortality rate, even though we realize that occasionally medical attention comes late in some cases of diphtheria where parents fail to call for help.

When a doctor sees a suspicious looking throat and waits for a report from the board of health concerning bacteriologic findings and for the development of more characteristic symptoms of diphtheria before administering antitoxin, that doctor is not only tempting fate but is guilty of criminal negligence. He is also equally guilty if he diagnoses diphtheria at his first visit and fails to give antitoxin in sufficient doses.

It really is pathetic to hear some doctors talk about giving antitoxin in doses of from 1,000 to 3,000 units, oftentimes the smaller dose being administered, when the gravity of the case justifies the administration of from 10,000 to 20,000 units as the initial dose, repeating it in four to six hours and as often thereafter in the same intervals as the symptoms indicate. It would be well for every doctor to remember that, barring the few and rare cases of anaphylaxis, the administration of antitoxin is not only harmless but is a genuine specific.

The dose of antitoxin serum is judged by its known strength or power of conferring immunity, and by the severity of the disease and the susceptibility of the patient to the infection. Not less than 10,000 units should be given as an initial dose, and repeated every four to six hours in severe cases, and doubled in amount in very malignant cases or in those with deeply seated cervical induration or laryngeal or nasal diphtheria. Large doses are required by young children. The fact that they succumb more quickly to the disease than older children makes proportionately large doses necessary. In laryngeal cases not only should the serum treatment be given early and in large doses, but it should be combined with intubation to relieve the obstructed breathing.

The New York Health Department recommends the following specific dosage of antitoxin: For infants under 2 years of age, from 3,000 to 5,000 units in moderate cases, from 5,000 to 10,000 units in severe cases, and 10,000 units in malignant cases; for children under 15 years of age, from 4,000 to 10,000 units in moderate cases, 10,000 to 15,000 in severe cases, and from 10,000 to 20,000 in malignant cases; for adults, from 5,000 to 10,000 units in moderate cases, from 10,000 to 20,000 units in severe cases, and from 15,000 to 40,000 units in malignant cases. Under malignant cases is included laryngeal diphtheria, and in these cases it is recommended that one-half of the antitoxin be given intravenously and one-half intramuscularly. The injection should be made deep in the subcutaneous cellular tissue and the swelling which results should not be rubbed. The New York Board of Health, and, in fact, all recognized authorities, urge the use of antitoxin in large doses early and freely.

It has been claimed by some persons that since the use of antitoxin more cases of complications or sequelae are met with than ever before, to which Hare replies, "The reason is manifest, viz., that before antitoxin was used all the very malignant cases died, whereas a large percentage of these are now saved, and suffer from lesions

which if antitoxin had not been used would have been fatal. Every patient who apparently suffers from the disease should receive this remedy, so potent for good and so lacking in harmful qualities even when given to nondiphtheritic persons. The physician who can obtain the serum and does not use it is not doing the best thing for his patient."

Statistics show that in cases which receive the antitoxin on the first day the mortality is often only 1 to 2 per cent., whereas with each day of delay the percentage rises, so that when it is not given until the fourth day the mortality may be as high as 40 or 50 per cent. As the use of antitoxin does no harm, it should be employed in all doubtful cases of diphtheria without waiting for a bacteriologic diagnosis.

The use of antitoxin for immunizing persons who have been exposed to infection should always be resorted to, and this is peculiarly true if the use of the Schick test reveals susceptibility. The use of 1,000 normal antitoxin units will usually produce immunity for three or four weeks. The use of the Schick test will aid in determining the course the physician should pursue, since it indicates those children that are susceptible to diphtheria and those that are practically immune. The test consists in injecting into the skin of the forearm, not under, about $\frac{1}{50}$ part of the so-called minimum lethal dose of diphtheria toxin for a 250 gm. guinea-pig. If the patient's blood contains $\frac{1}{30}$ unit of antitoxin in each cubic centimeter, the child is immune and no effect is produced, but if it needs antitoxin to artificially protect it, a reddened and tumefied area develops in from twenty-four hours to forty-eight hours, and lasts from seven to ten days, and then becomes brownish and scaly. A pseudoreaction consists in greater infiltration, is less sharply outlined and disappears in twenty-four to forty-eight hours. It does not scale. The method is perfectly safe and the toxin for the test can be obtained on the market in capillary tubes of toxin with a tube of salt solution.

All cases of diphtheria should be carefully isolated; children who have been exposed and not immunized should be quarantined for fourteen days; persons in perfect health who have been nursing such patients should also be quarantined, for in the secretions of the throat diphtheria bacilli may be carried by an apparently healthy nurse to another patient. The latter fact cannot be too strongly emphasized on the minds of both the physician and nurse, as it is highly probably that both are in a measure responsible for the spread of the disease. There is, however, an urgent need for recognition of

the fact that uncomplicated diphtheria is not only a preventable but a curable disease, and in consideration of the latter fact we desire to emphasize not only the importance but the necessity of giving antitoxin early and in large doses.

ATTENTION! EX-MEDICAL OFFICERS

The Indiana Historical Commission is now engaged in collecting and compiling the official war history of the state of Indiana and desires to incorporate in that history a complete and

Name
Name in full

Date and place of birth.....

From what medical school graduated.....
..... Date

Date of your commission..... Rank.....

Branch of service.....

Called to active service.....
Date

Discharged from service..... Rank.....
Date

Do you now hold Reserve Commission in Army
or Navy?..... Rank.....

HISTORY OF MILITARY SERVICE

Giving detailed account of various posts, assignments, promotions, character of service, honors or decorations conferred and by whom, and any other data of interest in regard to your service in the Army or Navy.

.....

.....

.....

.....

.....

.....

.....

.....

comprehensive record of the part played in the great war by the physicians of this state. The office of the surgeon-general is lending its aid in the procuring of the necessary data but it is essential that every ex-medical officer in this state cooperate by sending in his own military record. The war history of the state of Indiana, published by the state, will be the only official history and it would be most unfortunate if any ex-military officer failed to have his record incorporated in this history. In addition to assisting in the preparation of this work your record is to be filed in the permanent records

of The American Legion and it is of vital importance that you fill in the accompanying blank and mail it at once.

These records must be in the hands of the committee at the earliest possible moment and you are urged to fill in your blank at once and mail it to Dr. John R. Newcomb, 411 Hume-Mansur Building, Indianapolis.

Call the attention of all ex-medical officers you know to this matter and any information in regard to men who died while in the service should also be sent in.

The preparation of the medico-military history of the state is a task of considerable magnitude and we should regret very much if any record is omitted. See that yours is not by sending your report today.

NOGUCHI'S DISCOVERIES IN YELLOW FEVER

The Rockefeller Foundation and the Rockefeller Institute are doing a remarkable work that very few know anything about until some announcement appears in the newspapers or lay and scientific journals. Except for the patronage of John D. Rockefeller perhaps a great many of the discoveries which are of inestimable value to the human race would not be made, for want of time, money and inclination on the part of scientists to delve into research work.

Fortunately, Mr. Rockefeller has made it possible to employ all-time workers, among them the noted Japanese bacteriologist, Dr. Noguchi, whose fame already has spread throughout the world. His latest valuable work has been in connection with the cause of yellow fever. Last year he went to Ecuador to study the disease and this year he went to Yucatan for the same purpose. In Ecuador, Noguchi succeeded where earlier workers had failed, by inducing in guinea-pigs through the transference to them of a small quantity of the blood of yellow fever patients in the earlier days of their attack, symptoms and changes quite similar to those of the human disease. He also found young dogs and monkeys to be susceptible to inoculation with the yellow fever blood. Finally, Noguchi succeeded in cultivating from the blood, at first of his artificially infected pigs and then of man, a living organism which he carried on through many successive generations in his culture tubes and from which, by inoculation, he could induce the identical fatal disease in the guinea-pig.

The new germ is described as a very delicate, filamentous, spiral thing, tapering at the ends,

and when alive, goes wriggling, rotating, and twisting about in the blood or culture fluid. It is not ordinarily visible when alive by direct light even with the strongest lenses, but it may be seen with dark field illumination. Noguchi has named it *Leptospira* (slender spiral) after its close relative, infectious jaundice; and to signalize its power to induce in its victims the characteristic jaundice, he surnamed it *icteroides*. So it takes its place in science as *leptospira icteroides*, alias, in the vernacular, slim spiral, the jaundice maker. Having thus established a series of important facts indicating that the new-found *leptospira* is at least the presumptive incitant of yellow fever in Ecuador, Noguchi naturally got on the trail of the *stegomyia* mosquito. His experiment showed that symptoms and tissue changes similar to those of yellow fever in man, may be induced in guinea-pigs by the bite of the female *stegomyias* which have previously sucked the blood of a yellow fever patient, or another guinea-pig artificially infected.

Since his return from Ecuador, Dr. Noguchi has been at work searching for the possibilities of developing an effective immunizing or curative yellow fever serum, and the result of this work is eagerly awaited by the medical profession.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

GEN. LEONARD WOOD, candidate for the Presidential nomination, has publicly advocated the establishment of a National Department of Health with a medical man at its head as a member of the President's cabinet. Hurrah for Wood! Now let us hear from Billy Bryan, McAdoo, Tom Marshall, and the other aspirants!

DAMAGES in the sum of \$5,000 have been awarded a plaintiff in a suit against a Fort Wayne doctor for injuries received by being hit by an automobile. It does not take much of a bump by an automobile driven by a man possessing any property to lead the injured person to believe that he is entitled to a very large pecuniary reward. However, the incident to which we call attention is a reminder that it is well to have protection in the way of indemnity insurance.

IN some of our sister states the state medical boards are vigorously prosecuting violators of medical laws. In this state prosecutions are few and far between, and seldom instigated by the Board of Medical Registration and Examination. We realize that the board is without sufficient funds to carry on an extensive campaign against violators of our medical laws, but there is no excuse for not instituting some prosecutions against notorious offenders, as also in giving moral support and encouragement to those medical societies and those prosecuting attorneys who are bringing suits on their own initiative.

IN a recent number of the *Chicago Tribune* there appeared a cartoon showing the people being rounded up by "strong-arm" methods to subscribe for liberty bonds for which they paid 100 cents on the dollar. Glowing promises were given that the bonds never would be worth less than their face value and that the money put into them was merely an investment. Below was another picture showing the same crowd of people forced by necessity and the high cost of living to flock to the bankers and brokers to sell their bonds and receiving therefor considerably less than par. The inference is that if the people came to the rescue of Uncle Sam with 100 cents to the dollar, Uncle Sam should be fair enough to maintain the value of his obligations at 100 cents on the dollar. The old saying "as good as a government bond" will have to be changed.

THE Calhoun County (Michigan) Medical Society has passed the following resolution: "Membership in the Calhoun County Medical Society shall be permitted only to American citizens." Such a resolution if passed by a medical society in Milwaukee or Cincinnati would result in a reduction in membership in the society that passed the resolutions, but we heartily commend the spirit which has prompted a Michigan medical society to take such action. It is worthy of repetition by every medical society in America. There never was a time in

the history of America when we have needed loyal citizens more than we need them now. We ought to stamp out un-Americanism of every kind, whether it crops up in the name of pro-Germanism, socialism, Bolshevism, or anything else that is opposed in any manner to our American institutions.

THE daily papers report that the principal of the Shortridge High School of Indianapolis has forbidden the wearing of silk stockings by the girl students of the school, and that the ban will continue during the influenza epidemic. Why make influenza the goat? As also why such ridiculous order anyway? Silk stockings cause no more influenza and colds than any other kind of stockings if they are worn regularly. Can it be possible that the principal of the Shortridge High School is straining his eyes too much, or is terribly nearsighted and is jealous because he is missing something? Furthermore, how long has it been that the principal of a high school could dictate as to the kind and quality of clothes the pupils are to wear as long as they conform to the usual customs? Perhaps the girls themselves or their mothers will have something to say, but at best pedagogues who are wise will studiously avoid offering any suggestions as to how girl students shall cover their legs.

THE attorney-general of Indiana has given an opinion to the effect that the secretary of the State Board of Health cannot be removed from office during the period for which he has been elected. It was rumored that plans were being made to remove Dr. Hurty and his assistant, Dr. King. Whenever you "rub the fur the wrong way," especially in your contact with politicians, you are apt to get into trouble. Dr. Hurty is not particularly diplomatic, and in consequence has made enemies among politicians, but he is one of the most competent and efficient health officers in the United States, is so recognized by all whose judgment is worth considering, and it will be a real loss when Indiana loses his services. We hope that there will be enough sensible and consistent people with influence who can offset the efforts of a few sore headed politicians who are trying to get Dr. Hurty's scalp. The State Board of Health is one place where we need competent and efficient officers, and the office should not be the football of politics nor should it be subject to the petty dislikes and enmities of a few "two by twice" politicians who may at some time or other very justly have had their toes stepped on.

It may be well for the members of the Indiana State Medical Association to learn that at the next special or regular session of our legislature we are going to have to fight harder than ever before the efforts of chiropractors and other pseudomedical cults to break down our present medical laws and lower the standard of medical education and requirements for medical practice in the state of Indiana. These obstructionists will be actively aided by the Christian Scientists, the League for Medical Freedom, and other cults and organizations, the members of which seek to treat the sick and suffering without going through with the formality of being properly educated and trained for such work. Money without stint will be spent to carry on the fight, and already expensive and widely distributed propaganda is having the influence of converting the unthinking politicians. The best legal talent and the most influential people who can be secured as lobbyists will be employed to help in the work of destruction. It is time for the members of the regular medical profession, individually and collectively, and for all others who desire to see proper and just educational standards maintained, to get busy in an effort to counteract the baneful influences now at work. The people of the state of Indiana can ill-afford to have our present educational standards lowered. Rather should the standards be elevated, and for that reason the present efforts of those who are trying to let down the bars should be counteracted by vigorous work on the part of those who appreciate our present very just and equitable laws.

COMPULSORY health insurance will be an issue in the next Indiana legislature. It may not, and probably will not, be brought up as a direct result of any great enthusiasm for the project on the part of anyone in Indiana, but there are a few labor leaders and a few mentally warped "up-lifters" residing in other states who are attempting to have compulsory health insurance adopted in every state in the Union. The medical profession is just beginning to awaken to the dangers threatened by the adoption of any such Eutopian scheme, and the sentiment of objection is growing so rapidly that it is a safe bet that before many moons there will be few medical men who will be ready to champion the cause of compulsory health insurance. As a matter of fact, so-called health insurance is a scheme for forcing charity on a portion of the community which neither requires nor desires charity, and it is a scheme

that few of the working men, the employers, or the medical profession have favored. It is estimated that compulsory health insurance in the state of New York would cost \$200,000,000 annually, which would come out of the pockets of the people generally and benefit a comparatively small proportion of the population. It also has been shown that fourteen of the largest self-insuring corporations in New York state have spent \$2,178,000 to distribute \$5,353,000, or 41½ cents to distribute \$1 in benefits under the relatively simple conditions encountered in compensation work. It also would cost the state of New York an additional 41½ cents to supervise the spending of each dollar. This means that in the state of New York it actually costs 46 cents to distribute \$1 in benefits, including medical services under the compensation law. What would the overhead and collateral waste be under a politically controlled system of compulsory health insurance attempting to cover even such minor illnesses as common colds. As one writer in the *Ohio State Medical Journal* says, "The medical profession knows that the financial resources for the prevention and treatment of disease are never any too great. Can the medical profession afford to permit the consummation of a scheme in which nearly one-half of the available resources will be wasted before a single penny can go to the care of cases of real sickness?"

WHY SOME DOCTORS ARE "HARD UP."—Once in a while we print an editorial from another journal for the reason that the other fellow has said the thing better than we could say it ourselves. This time, we have borrowed from *Patchwork*, the able little publication issued by the E. L. Patch Company, pharmaceutical manufacturers, of Boston, Mass. Here it is:

"A Brooklyn physician sent us a clipping from the *Bulletin* of the Lawrence County Medical Society. It contains some cuss words—words, we were told, when we were young, were not nice to use. But, the author evidently had reasons for calling strong language to his aid—or thought he had. If you are a doctor you may know whether he was justified or not. He said:

"The average man will give an attorney from \$3,000 to \$5,000, together with a lifetime of praise, to keep him out of the penitentiary for from two to ten years, yet, at the same time, will raise a phosphorescent glow and a kick that can be heard around the world if a doctor charges him \$50 or \$100 to keep him out of Hell for a lifetime. We are the only people, under God's ethereal tent today, who keep open shop for twenty-four hours a day, for 365 days each year. We also are the only laborers who keep on working for people who do not pay."

"After reading that, it flashed into our mind that one difference between the attorney and the doctor is that, while the attorney presents a bill pretty promptly, with a statement the first of each month, to his client, most doctors make no real effort to collect the money due them. The specialists, with offices in the city, are an exception to this condition. They employ bookkeepers and send a bill and statement each month, with the result that they collect a large part of the money due them.

"One physician told one of our salesmen during the month of May that he was hard pressed financially and that he had not yet sent out his January bills.

"We wonder if there is not, in the town of that physician, some young lady who could be easily trained to keep the doctor's books for him and see that statements were sent out promptly the first of each month. Such a person need put in only a part of her time at the doctor's office.

"As a matter of fact, a great many country physicians would be much better off if they would employ such a person on full time. They do not need to hire a trained bookkeeper, either.

"Get any girl who is decently bright and buy for her a correspondence course on bookkeeping. Train her to keep your office neat and assist you in many simple duties. We will venture a guess that you will be able to devote more time to real problems of your work and your increased income will more than pay for your assistant."

Absolutely true! Not only could such a bright girl attend to the bookkeeping and collections, but she could be trained to give assistance in office treatments, to administer anesthetics, make urinary examinations, attend to the doctor's medicines; in other words, make herself simply invaluable.—*The American Journal of Clinical Medicine*, March, 1920.

DEATHS

JOHN WILLIAM CLARK, M.D., aged 94 years, died March 15 at his home in Rushville.

SIMON D. HORNOCKER, M.D., died March 16 at his home in Silverville, aged 87 years.

ROBERT T. GIFFIN, M.D., died March 3 at his home near Logansport, aged 75 years.

MRS. HELEN E. KAHN, wife of Dr. David L. Kahn, died at her home in Indianapolis on February 26.

CHARLES E. BLACKER, M.D., died March 23 at his home in Indianapolis, aged 78. He graduated from the Medical College of Ohio in 1880.

MRS. MARY A. JOHNSTON, wife of W. R. Johnston, M. D., Charlottesville, died at St. Vincents Hospital, Indianapolis, on January 11, aged 50 years.

MRS. SUSAN G. TODD, widow of Dr. L. L. Todd who died in Indianapolis eighteen years ago, died Wednesday, March 3, in Indianapolis, aged 85 years.

MRS. MARY LLOYD KEIPER, wife of Dr. George F. Keiper of Lafayette, died Tuesday, March 9, after an illness of several months. She was 49 years of age.

JOHN J. THEORELL, M.D., of Porter, died February 20, of intestinal nephritis, aged 71 years. He was graduated from the Hahnemann Medical College at Chicago in 1898.

VALENTINE BOWERS, M.D., aged 77 years, died at his home in Fankfort on March 4. He was graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1880.

A. C. MACHETTE, M.D., of Bourbon died February 15, aged 83 years. He graduated from the Northwestern Medical School, Chicago, in 1863 and had practiced medicine in Bourbon fifty-five years.

SAMUEL HOLLIS, M.D., of Hartford City, died suddenly March 13, while making a professional call, aged 68. He was graduated from the Kentucky School of Medicine, Louisville, in 1879. He was a member of the American Medical Association, vice president of the Indiana State Medical Association, and a member of the Delaware-Blackford County Medical Society. He had practiced medicine in Hartford City for the past twenty-one years.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. R. C. ERB of Lafayette has removed to Winamac for the practice of medicine.

DR. A. P. WARMAN, Clinton, expects to locate in Terre Haute in the near future for the practice of medicine.

DR. L. E. SOMERS of Vera Cruz moved to Monroe April 1, where he is to be associated with Dr. C. C. Rayl.

THE Mudlavia Springs Hotel and Sanitarium at Kramer was completely destroyed by fire recently with a loss of \$250,000.

PLANS are being drawn for the construction of eight new buildings to be added to the Methodist Children's Home at Greencastle.

EDWARD C. REGISTER, M.D., for twenty-eight years editor of the Charlotte (N. C.) *Medical Journal*, died February 18, aged 60 years.

DR. R. C. JEWELL of Garrett and Miss Frances Bigger of Xenia, Ohio, were married February 18. They have located in Garrett.

THE question of establishing a county hospital as a memorial to the Clark County soldier dead will be submitted to the voters at the May 4 election.

At a special election March 10, Blackford County residents voted in favor of the erection of an \$80,000 County Hospital. The proposal carried by a majority of 782 votes.

A RESOLUTION asking the teaching of sanitary instruction in the normal schools and that the common and high schools take up the subject, was passed in Richmond on March 11.

MISS CHARLOTTE M. SMITH of Columbus and Dr. Guy M. Owsley of Thorntown were married February 28 at Columbus. Dr. and Mrs. Owsley will make their home in Thorntown.

DR. ALEMBERT W. BRAYTON, Indianapolis, celebrated his seventieth birthday March 3. He located in Indianapolis in 1877 and has practiced medicine in that city since that time.

THE Board of Adams County Commissioners, in session March 2, ordered that the question of building a county hospital in Decatur be submitted to the voters at the May primary election.

THE graduating exercises of the Good Samaritan Hospital Training School were held on Sunday evening, March 7, at Kokomo. Only one nurse, Miss Helen Diamond, received a diploma.

UNION CITY is to have a new maternity hospital after May 1. Dr. G. H. Davis has purchased a large home which will be converted into such a hospital for his patients and the patients of other doctors.

THE physicians of Gary have increased their fees, the change became effective March 4. Charges for day calls are \$3, calls between 6 p. m. and 10 p. m. are \$4, while calls from 10 p. m. to 7 a. m. are \$5.

THE basement of the Dr. J. L. Sharp Sanitarium Building at Danville was considerably damaged by a fire caused by an overheated furnace on March 6. The damage by fire and water was fully covered by insurance, and is to be repaired at once.

A FUND of \$25,000 for the establishment of a journal for the medical department of the University of Cincinnati has been set aside by the will of the late Dr. Christian R. Holmes. Publication must be commenced within a year of Dr. Holmes' death.

DR. C. E. CHENOWETH, a Seymour physician, has been notified that he has been commissioned a major in the Medical Reserve Corps of the United States Army. He served as a captain during the world war, and was a surgeon in the Spanish-American War.

DR. HUGH S. CUMMING of Hampton, Va., has been selected to succeed Dr. Rupert Blue as Surgeon-General of the United States Public Health Service. Dr. Blue will remain in the service as assistant surgeon-general, doing research work in influenza.

A MEDICAL staff to act in connection with the Holy Family Hospital, LaPorte, was organized at a dinner given for the medical men of LaPorte by the Sisters, on February 24. The purpose of the organization of the staff is to improve the efficiency standard of the hospital.

THE twenty-first annual meeting of the American Proctologic Society will be held at Memphis, April 22 and 23. Indiana will be represented by Dr. Alois B. Graham, Indianapolis, who will present a paper on "Personal Experience in the Treatment of Internal Hemorrhoids."

DR. HERMAN G. MORGAN, secretary of the city board of health, Indianapolis, announced that in February there were 823 deaths and 566 births in Indianapolis, making the death total exceed the births by 257. This record is unusual and is occasioned by the high pneumonia death rate.

THE registrar-statistician of the state board of health reports that there were 9,184 fewer deaths in this state in 1919 than in 1918, the respective figures being 37,077 and 46,261. There was also a decline of 5,623 in births in 1919, and compared with the previous year, the respective figures being 58,690 and 64,313.

THE twenty-eighth annual meeting of the Association of Military Surgeons of the United States will be held at New Orleans, April 22 to 24, with headquarters at the Hotel Grunewald. Medical men, aside from those who are members of the association, are entirely welcome to attend any of the sessions at this meeting.

THE practice of many health officers in Indiana of charging fees for birth certificates to children of school age who desire to leave school and obtain employment, is illegal, and state examiners throughout the state have been warned that such fees will be charged back to the officers and that the practice must be stopped.

DR. MARION F. PARRISH, who has been practicing medicine in Monroe for the past twenty-three years, will leave April 1 for Chicago, where he will take a course in roentgen ray and surgery, going from there to the Mayo Clinic in Minnesota for further study. He will locate in Decatur after the completion of his course.

DR. MARTIN TONER BALSLEY, formerly of Indianapolis, died at his home in Joplin, Mo., after several months' illness. He graduated from the Medical School of Butler College, Indianapolis, in 1882, practiced medicine in Indianapolis until 1884, when he moved to Danville. Later he moved to Missouri, where he made his home until his death.

DR. GEORGE REA and Miss Lillian Girard, R.N., are in charge of the Fort Wayne Venereal Clinic which reopened on February 23. Dr. Rea, who succeeds Dr. Gemmill as head of the clinic, only recently returned from Manila, P. I.,

where he was in charge of venereal disease work in the detachment of the United States Army stationed in the Islands.

DR. J. C. FULTON celebrated his fiftieth anniversary in the practice of medicine in Wells County on March 11. On March 11, 1870, Dr. Fulton opened his first office in the town of Murray, where he practiced medicine for eighteen years. In 1888 he removed to Bluffton and from that date until now he has ministered to the sick of that city.

FORMATION of the Terre Haute Clinic has been announced. Personnel are: Dr. D. R. Ulmer, surgery and diseases of women; Dr. W. H. Miller, eye, ear, nose and throat; Dr. W. P. Freligh, general surgery, and Dr. E. C. Gilliland, internal medicine. Roentgen ray, pathological and clinical laboratories are installed. Facilities for radium administration are available.

IT has been reported that the proceeds of the 1919 sale of Red Cross Christmas seals would amount to more than \$4,100,000. The chairman of the central committee of the American Red Cross has notified the National Tuberculosis Association under date of January 27, that the American Red Cross will discontinue the sale of seals as a means of raising funds for the organization.

AN appropriation of \$4,000,000 for the immediate needs of Public Health Service hospitals has been made by Congress. The funds will be used in hospitals occupied by war risk insurance patients. Forty-three hospitals are now being operated by this department for the care of discharged, disabled soldiers, sailors, marines, and war nurses who are beneficiaries of the war risk insurance act.

THE tenth annual meeting of the medical section of the American Life Convention was held at French Lick Springs, March 10 to 12. The following officers were elected: Dr. Frank L. Truitt, Indianapolis, chairman; Dr. Calvin H. English, Fort Wayne, vice chairman; Dr. Frank L. B. Jenney, Chicago, secretary (reelected), and Dr. Henry Wireman Cork, Minneapolis, a member of the board of managers.

ACCORDING to the librarian, the University of Berlin is in quite desperate straits for lack of scientific literature. The university does not

have the funds to subscribe to foreign periodicals or to purchase works that had been published in other countries during the war. Moreover, the books already on hand in Germany are flowing out of the country in great numbers. Even the textbooks, when the editions dating from cheaper times are exhausted, will become unbelievably expensive.

At a recent joint meeting of the Council of Education of the American Medical Association and of the Association of American Medical Colleges, the association went on record as requiring organic chemistry for entrance this coming fall in the schools of medicine holding membership in the American Medical Colleges. Twelve semester hours in organic chemistry is demanded. Another resolution was passed requiring eight semester hours of physics, beginning with Jan. 1, 1921.

THE Irene Byron Anti-Tuberculosis Hospital is to have three additional wings, with accommodations to care for ninety more patients, erected if present plans are consummated. The conditions on which the erection of three additional wings are contingent are: That the law relative to the institution is amended at the coming special session of the legislature and that contracts with other counties to care for their patients are closed. That these conditions will be accomplished is almost certain.

ELMER ERNEST SOUTHWARD, M.D., Boston, died suddenly on February 8, at the Prince George Hotel, New York. He was graduated from Harvard University School of Medicine in 1901. The honorary degree of Doctor of Science was given him by Georgetown University, Washington, D. C., in 1917. At the time of his death he was assistant professor of neuropathology in Harvard Medical School, and assistant editor of the *Journal of Nervous and Mental Diseases*. He was 44 years of age.

COL. FREDERICK F. RUSSELL, M. C., U. S. Army, secretary of the Medical Veterans of the World War, states that during February, 169 new members joined, making a total membership of 2,711, divided as follows: Medical Corps, U. S. Army, 1,245; Medical Corps, U. S. Navy, 51; Medical Corps, U. S. P. H. S., 62; contract surgeons, U. S. Army, 88; acting assistant surgeons, U. S. P. H. S., 47; members local board, 527; members examiner local board, 183; members Medical Advisory Board, 508.

At a meeting of the board of governors of the National Anesthesia Research Society, held in Cleveland in March, it was voted to have the annual convention of the society at Pittsburgh the week of October 4, this meeting to be in conjunction with that of the Interstate Anesthetists Association, and the Pennsylvania Medical Society. In order to augment interest in the primary purpose of the society—research—the governors voted \$200 to be apportioned in prizes for the best papers on research in anesthesia, such papers to be read at the national meeting.

THE following organizations have announced that they will hold meetings in New Orleans during the days immediately preceding those on which the scientific assembly of the American Medical Association will meet: Air Service Medical Association of the United States; American Radium Society; Association for Study of Internal Secretions; Association of American Teachers, Diseases of Children; Association of Military Surgeons of the United States; Louisiana State Medical Society; Medical Veterans of the World War, and the Radiological Society.

DURING March the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Abbott Laboratories: Elixir Barbitol Sodium.

Antoine Chiris Company: Barbitol-Chiris; Barbitol Sodium-Chiris.

Gilliland Laboratories: Schick Test (Gilliland).

Hollister - Wilson Laboratories: Ampoules Corpora Lutea Soluble Extract - Hollister-Wilson; Ovarian Residue-Hollister-Wilson.

Vitalait Laboratory of California: Condensed Vitalait.

THE Interchurch World Movement (45 West Eighteenth Street, New York City) has issued an appeal for physicians for five years' service in the near and far eastern countries. The appeal is directed chiefly to recent graduates and to physicians discharged from military service who have not yet become located for practice. There are places for more than 600 physicians, men and women. Married physicians who enlist for five years will be provided with a home and an annual salary equivalent to \$3,000 in United States currency. Single physicians will be allowed an annual salary of \$2,000. All traveling expenses will be paid.

Two events of interest in the progress of hospital standardization during the past month are: (1) A gift of \$75,000 from the Carnegie Corporation to the American College of Surgeons to be used for hospital standardization; (2) the hospitals of New York City, under the direction of the department of public charities, officially adopted the standardization plan of the colleges. This present gift from the Carnegie Corporation is the second which the corporation has made to the college, having given \$30,000 in 1916, which makes a total of \$105,000 for hospital standardization. This amount of course is supplemented by funds of the college.

SENATE BILL No. 3959 has been introduced by Senator Kellogg to incorporate the National Board of Medical Examiners of the United States of America. It provides that Rear Admiral William C. Braisted, U. S. Navy; Major-Gen. Merritte W. Ireland, U. S. Army; Surg-Gen. Rupert Blue, U. S. P. H. S.; Admiral Edward R. Stitt, U. S. Navy; Col. Louis A. LaGarde, M. C., U. S. Army, retired; Asst. Surg-Gen. William Colby Rucker, U. S. P. H. S., and Drs. Herbert Harlan, Baltimore; Isadore Dyer, New Orleans; Victor C. Vaughan, Ann Arbor, Mich.; Walter L. Bierring, Des Moines, Iowa, and such other persons as may be chosen who are members of the National Board of Medical Examiners, an unincorporated, non-profit association, known as the National Board of Medical Examiners, and their successors, are hereby created and declared to be a body corporate.

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County	Secretary	Date
1.	Decatur,	C. R. Bird.....	Feb. 1, 1920
2.	Fayette,	R. H. Elliott.....	Feb. 1, 1920
3.	Franklin,	E. M. Glaser.....	Feb. 1, 1920
4.	Fulton,	A. E. Stinson.....	Feb. 1, 1920
5.	Jasper-Newton,	O. E. Glick.....	Feb. 1, 1920
6.	Jefferson,	O. A. Turner.....	Feb. 1, 1920
7.	Marshall,	Harry Knott.....	Feb. 1, 1920
8.	Posey,	John Ranes.....	Feb. 1, 1920
9.	Shelby,	F. E. Bass.....	Feb. 1, 1920
10.	Sullivan,	J. B. Maple.....	Feb. 1, 1920
11.	Union,	J. D. Shonwald.....	Feb. 1, 1920
12.	Warrick,	J. F. Samples.....	Feb. 1, 1920
13.	Washington,	Claude B. Paynter.....	Feb. 1, 1920
14.	Wells,	G. B. Morris.....	Feb. 1, 1920
15.	Whitley,	H. M. Egoft.....	Feb. 1, 1920
16.	Delaware-Blackford,	H. D. Fair.....	March 1, 1920
17.	Grant,	Nettie B. Powell.....	March 1, 1920
18.	Hancock,	C. H. Bruner.....	March 1, 1920

19.	Knox,	D. H. Richards.....	March 1, 1920
20.	Madison,	Doris Meister.....	March 1, 1920
21.	Monroe,	J. E. P. Holland.....	March 1, 1920
22.	Scott,	J. P. Wilson.....	March 1, 1920
23.	White,	H. B. Gable.....	March 1, 1920
24.	St. Joseph,	R. B. Dugdale.....	April 1, 1920
25.	LaGrange,	A. J. Hostetler.....	April 1, 1920
26.	Miami,	M. L. Wagner.....	April 1, 1920
27.	Steuben,	Mary Ritter.....	April 1, 1920
28.	Tippecanoe,	W. M. Reser.....	April 1, 1920
29.	Wabash,	L. O. Sholty.....	April 1, 1920

INDIANAPOLIS MEDICAL SOCIETY

Meeting of Jan. 27, 1920

Meeting called to order by the president, Dr. James A. Taylor. Dr. W. N. Wishard made the following motion: That a fund, known as an Educational Fund, shall be raised by subscription and placed in the hands of a trust company, the income on which shall be used to further the educational interests of the Indianapolis Medical Society by bringing men of national reputation to Indianapolis at such intervals as may be deemed best to address this society. Seconded by Drs. C. F. Neu and A. L. Marshall.

Dr. F. W. Cregor was in accord with the spirit of the motion but doubted the wisdom of the step at this time. The extra funds in the treasurer's hands at this time ought not to be used for this purpose. They should be reserved for aiding in the procuring of a home for the society. Dr. Cregor further suggested the diversion of the extra \$2 dues into a home fund.

Dr. A. E. Sterne: Educational value of men of national reputation to address society of great importance; cited the example of Dayton, Ohio.

Dr. Wishard moved to defer his motion until the next meeting.

The applications of Drs. J. Oscar Ritchey and Luther Williams were read for the first time.

PROGRAM

Paper, "Some Notes on the Wassermann, Blood and Urine Chemistry," by Dr. B. Erdman.

Paper, "Securing of Specimens," by Dr. V. H. Moon.

Paper, "Dark Field Examination," by Dr. H. K. Langdon.

DISCUSSION

Dr. J. R. Thrasher: Large number of different examinations at present, including cell count, globulin, colloidal gold, Wassermann and bacteriologic. Positive Wassermann in spinal fluid means neurosyphilis. Negative Wassermann may be found in neurosyphilis. Positive cell count, globulin and gold curve indicative of some pathology in spinal axis. Increased cell count shows an irritation. There are four gold curves, although they are not pathognomonic of their respective conditions: (1) Paretic; (2) tabetic; (3) luetic, and (4) meningal. Bacteriologic examination with isolation of organism will give diagnosis. Spinal puncture too often delayed. Element of danger is practically nil. Only in case of brain tumor must special care be exercised to have patient prone and remove small amount of fluid. In tumor extending entirely across the cord we have increased pressure, rapid flow and early cessation of flow. Spinal puncture should be made in all cases of syphilis. Some hesitate on account of headache. This condition is not dependent on amount of fluid withdrawn but is occasioned by the puncture of the dural membrane. Fluid drains slightly

for several days before hole heals. Patient should be in bed for twenty-four hours following puncture. If no headaches arise at end of two hours patient may remain up.

Dr. H. R. Alburger: I wish to point out a few of the troubles of the laboratory man. So many things are expected of us. Generally we must work alone without any clinical data and yet we are expected to make diagnosis. The laboratory is only an aid to diagnosis. The physician ought to show as much interest in the laboratory side of the diagnosis as he does in the surgical phases. He ought to understand how to prepare specimens so that the best results might be obtained. He ought to endeavor to appreciate the position of the laboratory man.

Adjourned. Attendance 72.

Meeting of Feb. 3, 1920

Meeting was called to order by the president, Dr. James H. Taylor. The minutes of the previous meeting were read and approved. The application of Dr. A. M. Mendenhall for transfer from Rhode Island to Indianapolis was read for the first time. Applications of Drs. Robert J. Masters, J. O. Thayer and O. B. Norman were read for the second time and referred to the council.

Program: Paper, "Migraine, a Gastric Neurosis," by Dr. William H. Foreman.

No abstract of Dr. Foreman's paper was submitted. Dr. Foreman asked Dr. E. N. Kime to explain the nerve supply in all its relation to the stomach.

DISCUSSION

Dr. H. H. Wheeler: Emborn says migraine is pain in head accompanied by nausea and vomiting. Whenever a part of body works more than usual we have headache. Strain or toxemia causes migraine, whether from kidney, eye, or gastro-intestinal tract, it is a body defense against toxins. Irritable rectum and descending colon gives cecal colic stasis. Appendicitis gives stasis in ascending colon. In case of destruction of mucous membrane get absorption of intestinal toxins.

Dr. A. B. Graham: Nature of migraine still unknown. Many views as to its etiology but as yet no anatomic lesion discovered. Many cases improved by treatment and yet complete cure rarely obtained. In 90 per cent. of the cases heredity plays an important rôle. Females of neurotic families are most frequently attacked. With such facts a certainty I am rather inclined to the view that the most tenable theory as yet advanced is that migraine is a neurosis. As to Dr. Foreman's theory that it may be considered a gastric neurosis, I am not at all convinced by the arguments he has presented. Formerly many pages were devoted to the description of gastric neuroses, at present various gastric symptoms, formerly classed among the neuroses, are shown to be dependent on demonstrable organic disease. Although migraine is now classed as a neurosis I would not be at all surprised to learn it is the result of an organic disease. Until a demonstrable lesion has been determined we are justified in calling migraine a neurosis. Likewise, it may be said that Dr. Foreman is safe in calling it a gastric neurosis until some one is able to prove that it is not such. Gastro-intestinal symptoms are very prominent. Own experience does not warrant my conceding that this is a gastric neurosis. Study of many cases between the paroxysms has not given any

data or findings that would lead me to believe it is a gastric neurosis. In the attack there are marked gastric secretory, motor and absorptive disturbances. Same true of epilepsy and yet we do not call this a gastric neurosis. In my own practice with treatment directed toward the gastro-intestinal tract I have experienced miserable failures in the prevention of recurrences. Relief is secured for some victims of migraine, by directing treatment toward the digestive tract, but as yet we have no therapeutic agent that will prevent a recurrence. Until some more tenable theory that migraine is a gastric neurosis is advanced we must classify it as a neurosis, the origin of which remains to be determined.

In the absence of Dr. L. D. Carter the president asked Dr. A. E. Sterne to discuss the paper.

Dr. A. E. Sterne: Misnomer to speak of migraine as gastric neurosis. Entirely too narrow a concept. Syndrome migraine is from metameric arrangement. Make no difference whether stimulation goes toward periphery or central ward. From my own experience migraine and epilepsy not same thing. Only similarity is that we know nothing about them. Some end spontaneously, probably through influence of endocrine glands. Migraine is a paroxysmal affliction occurring as epileptic attacks. In both we have a distinct clinical concept. Must limit discussion. Sometimes paroxysmal migraine ceases, is replaced by paroxysmal epilepsy. In turn it persists for some time and again the migraine returns. Sometimes spontaneous disappearance. As to cure of malady we get very bad results. In the relief of immediate attack our efforts are fairly successful. Recurrence in 95 per cent. In treatment attack every possible abnormality.

GENERAL DISCUSSION

Dr. Foxworthy: Subject offers field for work. In migraine I always look for focal infection and frequently find it. Often of gastro-intestinal origin.

Dr. Wynn: Neuropathic predisposition very important matter, atypical cases frequent. Speaker has had migraine since 1889; sudden, with dilatation of pupils, unable to read; dancing figures on walls, cannot anticipate them, lasts from one-half hour to two hours; paroxysmal, short duration.

Dr. Bahr: Hereditary feature is prominent. As a rule appears in the young. In adult not genuine casts. Slight toxemia with psychopathic disposition. Parallelism of migraine and epilepsy: (1) Periodicity; (2) toxicity; (3) various forms of equivalents. May have migraine without headache. Vomiting is best remedy as vasodilator. Two types: (1) Abortive; (2) classical. Often have symptomatic migraine as in brain tumor, paresis, tabes.

Dr. Custer: Cited case of migraine which persisted. Finally disappeared for some time following rectal dilatation.

Dr. E. N. Kime, closing: Sudden disappearance speaks for nerve origin rather than gastro-intestinal toxemia.

Dr. Foreman: Do not want it understood that migraine comes from gastro-intestinal tract. Classical attack always involves gastro-intestinal tract. By saying neurosis we admit our inability to fix definitely the condition. Migraine is the spasmodic attack, unheralded.

Attendance 44.

Meeting of Feb. 10, 1920

Meeting was called to order by the president, Dr. James H. Taylor. The minutes of the previous meeting were read and approved. The applications of Drs. Harry H. Heinrichs, Donald L. Miller and Edwin G. Kyte were read for the first time. The applications of Drs. Henry F. Crossen, J. Kent Leasure, Oliver P. Mercer and John H. Talbott were read for the second time and referred to the council. Drs. Olin B. Norman, A. E. Mozingo, Joseph O. Thayer, Robert J. Masters and A. M. Mendenhall, having been recommended by the council were elected to active membership in the society. Dr. G. H. A. Clowes was elected to honorary membership.

Program: Subject, "What the U. S. Government Is Doing for Sick Soldiers," by Dr. C. A. Stayton.

Abstract.—War Risk Insurance Act of September, 1917, provided that all discharged soldiers, sailors, marines and army and navy nurses, male and female, should be entitled to compensation for death or disability received in line of duty, and also to reasonable governmental medical, surgical and hospital services, and such other appliances and equipment as was necessary for the health of the individual. Public Act No. 326, approved March 3, 1919, went a step further and authorized the Secretary of the Treasury to turn over the medical and surgical treatment and hospitalization to the United States Public Health Service and provided means for carrying out this treatment. Also provided for the transfer to the Public Health Service of certain base camp hospitals, the acquirement of hospitals released by the Army and Navy, and the construction, lease and purchase of institutions in the various parts of the United States. Ten million dollars appropriated. United States divided into fourteen administrative districts, each under the direction of an officer of the Public Health Service. This officer is responsible for the examination of all ex-service individuals filing claim for compensation. He is responsible to the Surgeon-General of the Public Health Service for the treatment and hospitalization of these individuals. Five thousand War Risk Insurance patients now under treatment. In addition about 3,500 War Risk Insurance patients under treatment in civilian hospitals. Men examined and degree of disability determined, that there may be a basis on which to grant their compensation. Many of the discharged soldiers, sailors, marines and nurses suffered a recrudescence of their war injury, or disease, after discharge from the military service. They are then cared for by the United States Public Health Service. During November, 1919, 25,000 disability ratings were given; over 30,000 patients directed from Bureau of War Risk Insurance to District Supervisors for physical examinations and about 24,000 hospital days were spent by War Risk Insurance patients in Public Health Service Hospitals. Approximately 614,900 discharged service men who suffered some disability on active duty, and are entitled to benefits of the Bureau of War Risk Insurance. To date only about 110,000 of these have been recipients of the medical treatment offered. Eighteen per cent. for wounds in action, 15 per cent. for tuberculosis, 11 per cent. for nervous and mental disorders, 6 per cent. for respiratory diseases other than tuberculosis, 4 per cent. were gassed, 2 per cent. paralyzed, remainder unclassified. To date, about 20,000 of these patients have received hospital treatment. A state supervisor, appointed in each state, to place an examiner on a fee basis in each county in the state which has a population of not over 70,000.

Counties of over 70,000 will have hospitalization unit with examiner on salary basis. Will refer cases needing hospitalization to these centers. At present only nine counties in Indiana not represented by an examiner. Marion County work very heavy. Since the opening of office, January 8, approximately 500 men have been examined, and about half of this number have received treatment in one form or another. Approximately sixty-five of the above have been hospitalized. Home Service Section of the American Red Cross, cooperating. Service and Information Branch of the War Department under the direction of Captain Bachus renders ex-soldiers valuable service in securing employment and straightening out many tangles which were the direct result of their service in the army or navy, such as unpaid allotments, liberty bonds which have been paid for and not delivered, etc. The National Headquarters of the American Legion have established a service branch with Mr. Sheridan in charge. The cooperation of the Marion County Medical Society, both individually and collectively, is urgently invited in carrying on the work in this county. Many cases where physicians have continued treatment on ex-service men for long periods of time. Physicians not getting any money from case, and patient not drawing any compensation. If these cases can be reported to the Public Health Service Office, 508 Meridian Life Building, Telephone No. Circle 1545, prompt medical attention will be given, providing they are entitled to it. The individual is entitled to compensation if he was discharged from the service because of physical disability, which was incurred in line of duty, or if he was in good physical condition at time of discharge, and some disability has arisen within one year from date of discharge. The claim must be filed with the bureau within one year from date of discharge.

Subject: "Public Nursing," by Miss Margaret Tupper, R.N.

Abstract.—At present we have thirteen nurses doing this work. Cases are reported to us by families, friends, welfare workers, nurses and doctors. The latter, I am sorry to say, report very few. We take care of medical, surgical and obstetrical work and prenatal cases. Also prepared for private cases. Serve tuberculous cases through Tuberculosis Clinic. Bed-side care and educational work done for private physicians. Fee 75 cents for first hour, 50 cents for second hour. Compensation for work ranges from above rates down to the free cases. Cost is about 60 cents per hour. Price will of necessity be raised. Also do contract nursing, as, for instance, for the Metropolitan Insurance Company; for industrial policyholders. Factory nursing on contract likewise. Over 25,000 visits made last year on over 6,000 cases.

Subject: "City Board of Health," by Dr. H. G. Morgan.

Abstract.—If public health is a purchasable commodity within certain limitations, is the city of Indianapolis purchasing enough of this highly essential municipal tonic to insure best health protection for its citizens? A nation, state or city cannot rank A No. 1 with a 3-A class record in health. In other words, the cornerstone of the success of a state, of a nation, or of a municipality so far as financial and business progress is concerned is directly dependable on the disease and resisting power of its citizens. Personal hygiene and sanitation taught to the public for many years. Difficult to believe that there still exists in most communities striking evidences of the lack of practical application of every day common

sense rules of personal hygiene and sanitation. The little neglects when scattered throughout a community and the sum total is taken at the end of the year, means that disease has made progress, and human life has been sacrificed. Behooves Indianapolis therefore to make a careful survey of the health of the citizens and see wherein conditions may be improved. Truism that the nation's most important crop is the baby crop. Future success of all finance and business progress depends on this. Recent physical examination given recruits proves conclusively gross carelessness in this community in matters pertaining to infant and child welfare. As the health of infants and children is neglected so is welfare and success of nation and city neglected. Indianapolis should then look first to the care of infants and children. This work is being undertaken in a most magnificent spirit by the Children's Aid Association. Doing high class prenatal and infant welfare work. Infant death rate as a result has decreased. Room for improvement. Indianapolis neglectful of sewage disposal. Carelessness in such matters increases the sick and death rate. Although advancing commercially city has not awakened to necessity of keeping before the eyes of citizens a good mortality rate. Expenditure of \$1 per capita per year out of which 27 per cent. goes to public health work and disease prevention and remaining to city hospital for medical charities is not sufficient. Must be an awakening to necessity of adequate appropriations for purchase of public health commodities, for not until then will city lead or take its place with other American cities which are forging to the front in the great twentieth century drive.

Subject: "Tuberculosis," by Miss Mary Myers, R.N.

Abstract.—The society, organized in 1913, aim to work in cooperation with other health organizations. County sanatorium first necessary, Sunnyside. Clubs of city have helped financially and learned much about tuberculosis and treatment. Sunnyside now planning capacity of 300 beds; at present seventy. Buildings for children and advanced cases to be erected. At present seven nurses in field; two clinic nurses and five educational. One paid by city, one by county, five by tuberculosis board. Neighborhood clinics being started; very satisfactory. Night clinics planned for workmen. Fresh air school established by tuberculosis board. Seven such rooms now in city. Modern health crusade for school children, established last year; 35,000 enrolled. This year 40,000 enrolled. Going into county schools—100 per cent. enrolled in county. Better that in city. Have four traveling exhibits. During winter months exhibits remain in schools and children write about public health and hygiene. In summer exhibits are in factories.

Adjourned. Attendance 40.

Meeting of Feb. 17, 1920

Meeting called to order by president, Dr. James H. Taylor. The minutes of the previous meeting were read and approved. The application of Dr. Ernest Rupel was read for the first time. Drs. Henry F. Crossen, Oliver P. Mercer, John H. Talbott and J. Kent Leasure were elected to active membership in the society.

Program.—Subject: "Fractures of the Os Calcis," by Dr. E. B. Mumford.

Abstract.—Fractures not uncommon but frequently overlooked in diagnosis. Disability great with ordinary treatment. The essential factors are the outward

rotation of the posterior fragment of the calcaneus and the production of a valgus position of the foot. The pain beneath the external fragment, due to pressure of the callus, or the fragment against the tip of the fibula and the pain along the inner border of the foot, due to the valgus position of the foot, are the diagnostic points. Best results obtained by reduction according to plan of Cotton and Wilson. Pass steel sound in front of tendo Achilles so that it rests on the superior surface of the calcaneus. With counter pressure through rod held under the foot the posterior fragment of the calcaneus is pulled downward and rotated inward, the tendo Achilles having been previously cut. The foot is put up in plaster-of-Paris cast in a position of marked cavus, and inversion. Remove cast at end of two weeks and begin active mobilization. Allow weight-bearing at end of third week, keeping the foot inverted for several months through the use of a shoe with one-fourth in lift on the inner side of heel and sole.

Subject: "Shaking the Shimmy," by Dr. Goethe Link.

Abstract.—1. Styles in women's dress are planned to exploit sexually some part of the anatomy.

2. These styles undergo an evolution toward an extreme. "Shaking the Shimmy" represents the most pronounced use of the breasts for attraction purposes and is the direct product of the present style in dress.

3. The motif of style: Exposed and constant moving breasts is the frequent cause of pathologic breast conditions in young women.

4. This pathology in so many young women will lead to an increase in the number of cases of breast cancer in the future.

5. The first essential in the treatment of these breast conditions in young women is support and immobilization.

6. A note of warning to surgeons is given that they may recognize this type and not subject them to unnecessary surgery.

DISCUSSION

Dr. M. N. Hadley: Fractures of os calcis frequently overlooked; often mistaken for sprain. Bone tenderness is a symptom in fracture frequently overlooked. Bone will be found extremely tender on both sides; this will warrant roentgen ray. Dr. Link's paper presents the question of the constantly changing styles and their influence on diseases of breasts. Unable to say whether there is an increase in diseases of breasts. Evidently Dr. Link contends that lack of support from the newer corsets causes disease. Two types mastitis: (1) Lobular; (2) lobar. Latter chronic condition; typical case is the gland which has not undergone involution following pregnancy. Lobular type long known and characterized by lump or lumps in breasts. Very chronic with some soreness and involvement of lymph nodes. Some cases atrophy, others undergo cystic degeneration. I cannot see how lack of support for breast will result in disease.

Dr. J. V. Reed: Dr. Mumford's paper very interesting. Spoke of two cases; both treated as bad sprain; one with cast other with bandage; walked on crutches; after ten weeks could not do without crutches; roentgen ray showed fracture.

Dr. C. R. Sowder: Glad to hear conservative statement of Dr. Link's concerning quick operation for removal of breast. Reports from laboratories show that a large number of breasts removed as malignant are benign.

Dr. H. O. Pantzer: Enjoyed hearing Dr. Mumford's paper. Concerning Dr. Link's theory of breast disease we find the savage woman is not vulnerable to this condition. I think it is the rapid transition from support to lack of support in the case of the present day woman. Operating on breast tumors overdone. Based on the so-called precancerous conditions.

Dr. A. S. Jaeger: Saw a number of cases of breast changes at a correctional institutions. Proved to be due to degenerate practices. Some cases showed lumps and others cystic conditions.

Dr. K. R. Ruddell: From trend of discussion seems we are criticizing operating. My opportunity in past years of seeing operations indicates few benign are removed, many cancers left untouched.

Dr. McNaull: Spoke of present day styles, such as short skirts, low neck, etc., being more conducive to health.

Dr. Link: closing: Any man presenting information on fractures is a philanthropist. Dr. Mumford's paper very good. My paper deals only with young women. Prevailing styles influenced pathology in breasts. Brassiere is wrong because it pulls breasts down. Murphy binder best to lift and immobilize breasts. Meeting adjourned. Attendance 80.

Meeting of Feb. 24, 1920

Dr. James A. Taylor being sick the meeting was called to order by Dr. Max A. Bahr, first vice president. Minutes of the previous meeting were read and approved. Dr. Foxworthy notified the society of the lapse of the special privilege regarding parking of autos for doctors.

PROGRAM

Paper: "Treatment of Empyema by the Open Method," by Dr. John Sluss.

Abstract.—The clinical history, the prognosis and treatment of empyema vary with the bacteriology. The form of infection should be the primary point of view in any consideration of the disease. That form of empyema occurring as an epidemic in the cantonments during the winter of 1917-1918 grew out of conditions most favorable to the spread of streptococci and allied infections and probably will not recur in many generations. The characters and the treatment of this epidemic form is therefore largely of retrospective interest only; and the experiences gained therefrom alone can furnish no safe guides for the management of the types of empyema commonly occurring in civil life. Insofar as such experiences apply to the disease as met with by the general practitioner the following principles of treatment may be adduced from them: (1) Simple aspiration as a routine treatment is unsafe, although in certain cases, as a temporary measure, it is useful to relieve an embarrassed lung, and in mild types may even be curative; (2) the method of continuous negative pressure combined with continuous irrigations with Dakin's solution, however valuable in epidemics will generally be regarded as unnecessary and impractical; there are certain inherent dangers in the use of Dakin's solution and it should never be employed in these cases under any technic except by those familiar with these dangers. (3) On the whole the safest routine practice consists in the resection of a small segment of rib under local anesthesia, followed by puncture of the plura and insertion of a medium sized drainage tube.

Complete repair of the external wound. In the mild cases this alone may be sufficient. In the mixed infections, after twenty-four hours, the plural cavity is filled with 1 per cent. dichlormain-T in chlorcosane and which is renewed once daily with such change of dressings. The tube is shortened *pari passu* with the expanding lung. (4) The technic is simple, within the scope of the most casual operator, involves no laborious and time consuming manipulations; but best of all it is practically free from pain, shock or pneumothorax. Confinement to bed is abbreviated and the patient is usually speedily cured "*secundem artem*."

Paper: "Surgical Treatment of Empyema by a Closed Method," by Dr. A. E. Mazingo.

Abstract.—1. The simplest, the most efficient, the most practical and has the lowest death rate of all methods for the treatment of acute empyema. 2. Single, early, minor operation without danger of shock or collapse of the lung and practical in the home and country practice. 3. Introduction of a small rubber tube into the empyemic cavity by means of a trocar-cannula; the intermittent removal of the secretion; constant negative pressure and rapid sterilization with Dakin's and formaldehyd solution, with a bulb syringe. 4. Rapid, permanent cures without scar or chest deformity; one small dressing which lasts several days and no skin irritation. 5. The diagnostic puncture or consultation in every serious pneumonia case and necropsy of every death following pneumonia would decrease the frequency of empyema undiagnosed. 6. No case should be subjected to a Schede, Eastlander or Delorme operation under six months nor before strong negative pressure has been persistently applied for a reasonable time. 7. Can effect cures in bilateral empyema, both sides being operated at the same time, with acute bilateral pneumonia present which treatment is impossible with the open method. 8. Many cases which have become chronic following open operation can be cured in a short time by the closed method.

On account of mechanical difficulties with the machine the films could not be shown.

Dr. Wynn presented the following amendments to the Constitution and By-Laws: I move to amend Article V of the Constitution of the Indianapolis Medical Society by the introduction of the word "librarian" after the words "secretary-treasurer." I would also move to amend Chapter 3 of the By-Laws by the addition of Section 6: The librarian shall be charged with the duty of advising with and cooperating with the librarian of the Indianapolis Public Library and with the librarian of the Indiana University School of Medicine, with a view to making the medical libraries as complete as possible and rendering them available to members of the society. He shall receive medical books, magazines, etc., donated to the society and make such disposition of them as will best serve the use of its members, subject to approval by the society.

Motion seconded and passed.

DISCUSSION

Dr. Moon: Cannot discuss from point of surgical technic. Get back to basic principles with regard to relationship of body to disease. Old practitioner used excellent judgment. If pus is present drainage will facilitate recovery. Drainage with least possible trauma benefits patient proportionately more. If closed method gives least trauma with proper results

I favor it. If pockets have formed more elaborate procedure needed on account of removal of part of chest wall with consequent collapse of lung.

Dr. William E. Gabe: Approximately thirty-five cases treated with rib resection under novocain. Three cases selected to try closed method: 1. Staphylococcus infection took sixteen days for healing. 2. Acute streptococcus hemolyticus during pneumonia following "flu." Fluid seropurulent; normal salt irrigation four days; Dakin's, two days; formalin in glycerin, nine days; tube removed and healed in two days. 3. Chronic case: rib resection fourteen weeks before Dakin irrigation eleven days; formalin glycerin eight days until bacterial count was lowered. Four days for healing, following points to be noted: (1) Closed method operation of minor character; (2) closed method only one to be used with impunity during pneumonia; (3) only way bilateral case can be operated; (4) cleanliness; (5) applicable in home and country practice.

Dr. Sowder: Has seen over 400 cases in two years. At Camp Custer, 156. Several methods, many deaths by open methods. Cases recovered by simple aspiration. Much impressed by method as presented by Dr. Mozingo. Secret of success lies in technic used in after-care. Best method up to present time. In pneumococcic infections simple drainage often suffices. Not so with streptococcic infection. Collapse of lung condemns open method during pneumonia. Early diagnosis of utmost importance.

Dr. Sluss, closing: Dr. Mozingo's method is deserving of much credit and consideration. Some open methods are decidedly antediluvian. In case of interlobar type the closed method could not be well used because one must search for the pocket. If in open method dispatch is used very little lung collapse is caused. Likes dichloramin-T for irrigation.

Dr. Mozingo, closing: Experience with dichloramin-T at Walter Reed Hospital was unsatisfactory. Formalin 2 per cent. glycerin good for chronic cases.

Adjourned. Attendance 85.

L. H. MAXWELL, Secretary.

LAKE COUNTY

The regular meeting of the Lake County Medical Society was held in the Gary Y. M. C. A., March 11, with thirty-two members present.

Dr. E. M. Shanklin presented his resignation as president, which finally was accepted with regret after much discussion and a losing attempt to persuade his continuance. Dr. F. W. McMichael of Gary was elected president, and Dr. H. J. White, Hammond, vice president.

Report of a case of encephalitis lethargica was given by Dr. E. M. Shanklin, followed by a general discussion. Dr. H. J. White of Hammond read a paper on "Compulsory Health Insurance in the State of Indiana," after which the following resolution was adopted, unanimously:

Resolved, That the Lake County Medical Society hereby goes on record as being unalterably opposed to the institution of compulsory health insurance in the state of Indiana, and that we offer our undivided support to the committee on Industrial and Civic Relations in their opposition to the introduction of such measure into the state of Indiana.

Adjourned.

EDWARD E. EVANS, Secretary.

THIRTEENTH DISTRICT

The annual meeting of the Thirteenth District Medical Society was held in the Elk's Temple, Elkhart, on Thursday, March 18, under the direction of C. Norman Howard, president, and James A. Work, Jr., secretary-treasurer.

The following program was of unusual interest: "Surgical Technic in Home Obstetrics," by F. H. Kelly, Argos; "The General Practitioner, Adolescents and a Healthy Race," by Major C. E. Reed, Culver; "Some Observations on the Physiology and Pathology of the Sinuses and Teeth" (illustrated by lantern slides), by E. J. Lent, South Bend; "Blood Pictures in Surgical Diagnosis," by W. H. Hillman, South Bend.

A banquet was served at 6:30 p. m., at which time Dr. E. M. Hoover of Elkhart paid tribute to the life of the late Sir William Osler.

A.

TIPPECANOE COUNTY

The Tippecanoe County Medical Society met in regular monthly session at the Hotel Fowler, "College Inn" banquet room, at 6 o'clock, on March 22, with twenty-three members and two visiting physicians present.

Prof. J. C. Jordan, professor of chemistry, Purdue University, delivered a very interesting scientific paper on "Chemistry and History of War-Developed Antiseptics." He discussed the development of the antiseptics with chlorin contents as worked out by Dakin. Before this time the most conspicuous chlorin antiseptic was upad—a chlorinated lime and boric acid combination that did not give satisfactory practical results.

Dakin's first experiment was with a group developed from Labar Vagues solution which produced an agent containing 4.5 per cent. to 5 per cent. of chlorin. This was objectionable because the medical application was long; solution unstable and the technic delicate; its virtue rating as 20 per cent. antiseptic and 80 per cent. technic. By other transpositions of elements in the amines group he developed chloramin-T, which was commercialized as chlorazine tablets; was fairly stable but its chlorin element was used up rapidly.

By further research he developed the present efficient product, dichloramin-T, which contains 12.5 per cent. chlorin, is fairly stable if kept in dark bottles and can be used in 2 to 4 per cent. strength in solutions of normal salt. This dichloramin-T was further rendered more efficient for use by dissolving it in chlorinated oil or paraffine; especially in eucalyptol.

One of the newer antiseptics developed during the war was halozone, a derivative of benzoic acid, which, when added to water in the proportion of 1 to 300,000, will sterilize water in thirty minutes without producing any appreciable unpleasant taste.

The war also developed in a lesser degree the so-called dye-antiseptics, or flamin-antiseptics, which are considered less injurious to tissues and very stable, being able to withstand boiling.

The paper was discussed by Dr. G. A. Thomas, who stated that dichloramin-T kept in brown bottles on ice remained stable for three weeks, and also that it was used successfully for preparing surgical areas.

Dr. A. J. Bauer spoke very enthusiastically of the good results he had obtained with dichloramin-T,

especially with the trade preparation chloralypsol, which was nonirritating, stable, destroyed infection and promoted healing.

Dr. G. P. Levering also spoke very favorably as to the results he had obtained from chloralypsol, but the wound must be dry—no water.

This society has a membership of sixty physicians in good standing, having added two new members this calendar year. The following report was submitted by the secretary at the close of the year 1919: New members during the year, none; active members in good standing at end of year, 58; died during the year, 1; resigned during war, 1; total number entering military service during the war, 26.

All have returned and resumed active private practice excepting Drs. Bitting and Lee. Dr. Bitting was out of private practice before the war and Dr. Lee is still in military service, being in a military hospital in Massachusetts. Thus, twenty-six members of this society have established an enviable reputation for loyalty at a great personal sacrifice and we take this opportunity to state that we are proud of them.

The meetings of this society, during most of the year, have gone by default, but more recently, since medical affairs have returned to normal conditions, we have had some of the best attended, most enthusiastic and most congenial meetings within the history of the society.

At the February meeting the constitution of this society was changed, providing for one meeting each month instead of twice per month, as formerly. Section 2 of Chapter 2 now reads as follows:

A meeting shall be held at hour and place to be designated, on the fourth Tuesday in each month of the year, except in July and August.

Adopted February, 1920.

WILLIAM M. RESER, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1920, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

ANESTHESIN-CALCO.—A brand of benzocaine complying with the N. N. R. standards (see New and Nonofficial Remedies, 1920, p. 33). Calco Chemical Company, Boundbrook, N. J.

GONOCOCCUS VACCINE (POLYVALENT) (GILLILAND).—A gonococcus vaccine (see New and Nonofficial Remedies, 1920, p. 283) prepared from a number of strains of *M. gonorrhoea* Neisser. Marketed in packages of four syringes containing, respectively, 250, 500, 1,000 and 2,000 million killed gonococci; also in packages of four 1 Cc. ampules containing, respectively, 250, 500, 1,000 and 2,000 million killed gonococci. The Gilliland Laboratories, Ambler, Pa.

OVARIAN RESIDUE-HOLLISTER-WILSON.—The residue from the fresh ovary of the hog, after the ablation of the corpus luteum. It is used for the same conditions as the entire ovarian substance (see New and Nonofficial Remedies, 1920, p. 201) but is claimed to be somewhat more stable. Hollister-Wilson Laboratories, Chicago (*Jour. A. M. A.*, March 6, 1920, p. 675).

PHENACAINE.—Holocaine hydrochloride. The hydrochloride of phenetidyl-acetphenetidine, a basic condensation product of paraphenetidine and acetparaphenetidine. Phenacaine was first introduced as holocaine hydrochloride. It is a local anesthetic like cocaine, but having the advantage of a quicker effect and an antiseptic action. Five minims of a 1 per cent. solution when instilled into the eye are usually sufficient to cause anesthesia in from one to ten minutes.

PHENACAINE-WERNER.—A brand of phenacaine complying with the N. N. R. standards. Werner Drug and Chemical Company, Cincinnati, Ohio (*Jour. A. M. A.*, March 27, 1920, p. 889).

PROPAGANDA FOR REFORM

GREEN'S DROPSY REMEDY.—This "treatment" is sold on the mail order plan and comes in the form of large balls or boluses, some smaller balls or boluses and, in some cases, includes "Tonic Tablets." The balls are taken, followed by substantial doses of magnesium sulphate. The A. M. A. Chemical Laboratory reports that the boluses, large and small, appear to contain powdered squill as their chief medicinal ingredient. The laboratory further reports that the "Tonic Tablets" contain an iron salt, probably dried ferrous sulphate, as the chief medicinal ingredient. Obviously, there must be no small amount of danger for a person in a dropsical condition to dose and drastically purge himself. The product is one that has no legitimate place among home remedies (*Jour. A. M. A.*, March 6, 1920, p. 689).

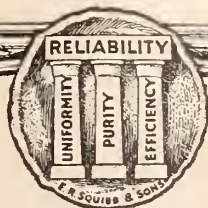
STANNOXYL.—On the assumption that tin workers were less troubled with boils than the average person, two French investigators proposed the use of tin compounds in the treatment of staphylococcus infections. Based on their work, a proprietary preparation—Stannoxyll—has been placed on the market with the claim that it is "composed of stannous oxid and specially purified metallic tin." Absurdly extravagant and unwarranted claims are made for the product (*Jour. A. M. A.*, March 6, 1920, p. 692).

HEPATOLA.—This was declared a fraud by the federal authorities in 1917, and the Hepatola Company was denied the use of the United States mails. It is still being sold in Canada. Hepatola is one of the many treatments claimed to remove gallstones. Analysis showed Hepatola to be the same old gallstone trick—that of giving the patient a large dose of some bland oil and following it up with a saline. The soapy concretions that are voided following this dosing are the "gallstones." Hepatola is essentially the same as "Fruitola" and "Mayr's Wonderful Stomach Remedy" (*Jour. A. M. A.*, March 13, 1920, p. 752).

MORE MISBRANDED DRUGS.—Boericke and Runyon's santonin and calomel tablets, acetanilid and quinin compound tablets, potassium iodid tablets, and morphin sulphate tablets did not contain the claimed amount of drug, and some aspirin tablets contained no aspirin. Sulferro-Sol was falsely claimed to cure pellagra, dyspepsia, indigestion, etc. Santal Pepsin Capsules was falsely claimed to be a specific for all bladder trouble, gonorrhea, gleet, inflammation of the ovaries, rheumatism, Bright's disease and a number of other conditions (*Jour. A. M. A.*, March 20, 1920, p. 818).

PLATT'S CHLORIDES.—The Council on Pharmacy and Chemistry reports that Platt's Chlorides is inadmissible to New and Nonofficial Remedies because its composition is uncertain and indefinite, and because the claims made for it are exaggerated and misleading.

(Concluded on adv. page xviii)



IMPORTANT SQUIBB BIOLOGICALS

AT THIS TIME OF THE YEAR

For the Treatment of Pneumonia

especially of Type I, (Lobar Pneumonia)

Anti-Pneumococcic Serum is of great value. It should be used early in large quantities and full doses repeated every six hours until the crisis is passed; also **Anti-Streptococcic Serum** is important for pneumonia in addition to anti-pneumococcic serum. It is best not to use the two mixed, but to administer each separately as the symptoms and bacteriological findings demand.

Anti-Streptococcic Serum Squibb is useful also in post-partum or puerperal sepsis, in erysipelas, and for septic conditions due to wounds infected with streptococci.

For Increasing Phagocytosis in Sepsis

Leucocyte Extract is of paramount importance, either in conjunction with vaccine and serum, or alone if the exact pathogenic microorganism can not be determined.

For the Prevention and Cure of Diphtheria

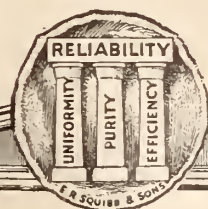
Diphtheria Antitoxin (Globulin) yields desired results. It is small in bulk for the number of units contained.

For the Prevention of Small-Pox

Small-Pox Vaccine is the trustworthy prophylactic.

Reprints giving detailed information will be furnished on request

E. R. SQUIBB & SONS, NEW YORK
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858
80 BEEKMAN STREET



A House of Service

2—Investigation of Therapeutic Agents

THIS house was only seven years old when a definite plan of pharmaceutical investigation was inaugurated. That was in 1874. The vegetable materia medica was then attracting the attention of the medical world. Little systematic work, however, had been done to develop this new field or its possibilities.

Parke, Davis & Company sent botanical experts into various sections of the United States and Canada in search of new drugs. One expedition went to South America, where it journeyed three thousand miles down the Amazon and spent two years in collecting drug specimens.

The new drugs were first carefully studied in the laboratory. Fluid extracts were made and, together with specimens of the drugs, distributed to a large number of physicians throughout the United States, to hospitals, and to scientists connected with leading medical and pharmaceutical colleges. These investigators were invited to communicate the results of their researches, whether favorable or unfavorable, to the medical and pharmaceutical journals.

Subsequently the reports were collected, classified and published in a series of "Working Bulletins"

as a definite contribution to medical science. Information was in this way properly correlated—information from medical practitioners, from hospital attachés, from scientific experts engaged in more extended research in pharmacology, chemistry and pharmacy.

As a result of this work, Parke, Davis & Company introduced many valuable medicinal agents that are now recognized by the United States Pharmacopœia and the National Formulary.

At the present time two organized staffs of investigators are engaged in research along definite lines. The personnel of one staff consists exclusively of laboratory experts—chemists, biologists and pharmacologists. The other is a clinical staff composed of three thousand practicing physicians in all parts of the United States and Canada.

When a new serum, vaccine, gland product or synthetic agent is developed by one of our laboratory experts it is submitted to the staff of clinical workers, who subject it to exhaustive tests for an extended period. If the results of this investigation are favorable, the product is added to our list of therapeutic agents; if unfavorable, it is promptly discarded.

PARKE, DAVIS & COMPANY

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 5

FORT WAYNE, IND., MAY 15, 1920

PER YER, \$2.00
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES	PAGE	EDITORIALS	PAGE
The Physician, "A Doctor of the Old School." Frank B. Wynn, M.D., Indianapolis.....	151	Compulsory Health Insurance.....	172
Influenza in Children. Nettie B. Powell, M.D., Marion, Ind.	153	Unnecessary Failures in Pathogenesis.....	173
Clinical Manifestations and Sequelae in Influenza. Charles P. Emerson, M.D., Indianapolis.....	155	Postgraduate Study in Indiana University School of Medicine.....	174
Morbid Anatomy and Bacteriologic Findings in Epidemic Influenza (Epidemic of Autumn, 1918; Camp Zachary Taylor). E. N. Kime, M.D., Indianapolis.....	157	Diagnostic Discrimination.....	174
A Few Observations Concerning Chronic Uterine Infections. Walter H. Baker, M.D., South Bend, Ind....	166	Group Medicine.....	174
Neurocirculatory Asthenia. Miles F. Porter, Jr., Ft. Wayne, Ind.	169	Editorial Notes.....	175
		MISCELLANEOUS	
		Deaths.....	181
		News Notes and Personals.....	181
		The Truth about Medicines.....	190
		SOCIETY PROCEEDINGS	
		Indianapolis Medical Society.....	187
		Thirteenth District.....	189
		Decatur County.....	189
		Fountain-Warren.....	190

NEXT ANNUAL SESSION, SOUTH BEND, SEPT. 22, 23, 24, 1920.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103, ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

DISEASES OF THE NERVOUS SYSTEM—JELLIFFE & WHITE

THE NEW (3rd) edition has been remodeled and largely rewritten and is *just off press*. In the fields of vegetative neurology and of the endocrinopathies new data have accumulated in large volume in the past two years; and a careful selection has been made of material which will best serve the practical purposes of the student and practitioner. In these chapters the student may see the trend of the development in this rapidly enlarging field. The chapters on sensorimotor neurology have been carefully revised to accord with many new observations which the great war has afforded.

In the third part the enlargements have been mostly along the lines of an interpretative presentation of the psychoses, with an increased emphasis on a description of the mechanisms involved rather than upon the grouping of certain symptom-complexes under conventional captions. Throughout the book there is built up a conception of that interrelation and interdependence between the several divisions of the subject which is their characteristic in nature.

CONDENSED TABLE OF CONTENTS

Introduction: Principles Underlying Classification of Diseases of Nervous System—Methods of Examination of Nervous System.

PART I.—THE PHYSICO-CHEMICAL SYSTEMS—The Neurology of Metabolism—Vegetative or Visceral Neurology—The Endocrinopathies.

PART II.—SENSORIMOTOR SYSTEMS—Sensorimotor Neurology: Cranial Nerves—Affections of the Peripheral Neurons: Lesions of the Spinal Cord—Diseases of the Brain—Neurosyphilis, etc.

PART III.—PSYCHICAL OR SYMBOLIC SYSTEMS—Neuroses, Psychoneuroses, Psychoses: The Psychoneuroses and Actual Neuroses—Dementia Praecox (Schizophrenia) Group—Psychoses Associated with Organic Diseases, etc.—Index.

By Smith Ely Jelliffe, M.D., Ph.D., Formerly Professor of Psychiatry, Fordham University, and Formerly Adjunct Professor of Diseases of the Mind and Nervous System, New York Post-Graduate Medical School and Hospital, and William A. White, M.D., Superintendent of St. Elizabeth's Hospital, Washington, D.C.; Professor of Nervous and Mental Diseases, George Washington University, and Lecturer on Psychiatry, U. S. Army and U. S. Navy Medical Schools.

Octavo, 1018 pages, with 470 engravings and 12 plates.

Cloth, \$8.00 net.

PHILADELPHIA
706-710 Sansom Street

LEA & FEBIGER

NEW YORK
2 West 45th Street

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, South Bend, September 22, 23 and 24, 1920

OFFICERS AND COMMITTEES FOR 1920

President CHARLES H. McCULLY, Logansport
 1st Vice President BUDD VAN SWERINGEN, Fort Wayne
 2d Vice President SAMUEL HOLLIS, Hartford City, Ind. 3d Vice President CHARLES STOLTZ, South Bend
 Secretary-Treasurer CHAS. N. COMBS, Terre Haute

SECTION OFFICERS

Surgical Section—Chairman, James Y. Welborn, Evansville; Vice Chairman, M. R. Combs, Terre Haute; Secretary, H. O. Shafer, Rochester.
 Medical Section—Chairman, Charles P. Emerson, Indianapolis; Vice Chairman, B. S. Hunt, Winchester; Secretary, Jane Ketcham, Indianapolis.
 Eye, Ear, Nose and Throat Section—Chairman, John R. Newcomb, Indianapolis; Secretary, E. M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1920), Joseph Rilus Eastman, Indianapolis. Alternate, Miles F. Porter, Fort Wayne.
 For two years (term expires December 31, 1921). Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington.

COUNCILORS

Chairman, G. W. H. Kemper, Muncie.	
DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920
2d—J. B. Maple, Sullivan	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921
6th—T. S. Spilman, Connersville.....	December 31, 1922
DISTRICT	TERM EXPIRES
7th—T. B. Eastman, Indianapolis.....	December 31, 1920
8th—G. W. H. Kemper, Muncie.....	December 31, 1921
9th—William R. Moffitt, Lafayette.....	December 31, 1922
10th—E. M. Shanklin, Hammond.....	December 31, 1920
11th—G. G. Eckhart, Marion.....	December 31, 1921
12th—E. E. Morgan, Fort Wayne.....	December 31, 1922
13th—H. M. Miller, South Bend.....	December 31, 1920

(See list of committees on page iv)

TO THE MEDICAL PROFESSION

Dear Doctor:

What do you do with your alcoholics and drug users?

The Hygeia Hospital Service is maintained to take care of the habit cases that come to you for advice. Our method of treatment destroys the craving.

We deliver a fixed result—practically one hundred per cent. There is but slight discomfort during the treatment. The toxemias resulting from the habit we correct.

If interested write for reprints.

Wm. K. McLaughlin, M. D.

Superintendent

Office—State-Lake Building,
 Suite 702-704,
 Chicago, Ill.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., MAY 15, 1920

NUMBER 5

ORIGINAL ARTICLES

THE PHYSICIAN

"A DOCTOR OF THE OLD SCHOOL"

FRANK B. WYNN, M.D.

INDIANAPOLIS

A critical estimate of the characteristics which go to make up the ideal physician of today will be enhanced by a study of that composite of the nineteenth century—"The Doctor of the Old School." Naturally a majority of the physicians of that period partook largely of the boorishness of their pioneer environment. Popular fancy then tolerated a certain amount of rowdyism in a doctor. He was not criticized for chewing tobacco, for almost every man was given to the habit. His profanity was excused since it was thought necessary in enforcing commands. If he drank (and not a few of them did) blame was placed on fatigue, loss of sleep and grilling rides over hills and through swamps. His courage must be braced up for unpleasant tasks. He was meagerly trained in medicine—an apprenticeship in a doctor's office, and six months of lectures constituting his medical education. His general education, while inferior, was above that of the average citizen. Such was the prevailing type of physician in the Ohio and Mississippi Valley the middle of the past century. Life in the malarial swamps, and trudging over well-nigh impassable roads, with insufficient sleep and irregular meals—was a killing business. His life-span was the shortest in the census groups. Crude and poorly equipped though he was, he bore like a hero the burden in the heat of his day.

It was in this atmosphere and out of this soil the idealized type grew—"The Doctor of the Old School." He constituted a small minority in the profession of his day, and yet amongst

his fellows exercised a dominant influence *then*, and even *now*. Although rarely a graduate from a literary institution he had perhaps taken a year or more at an academy or some sectarian college. His library was the best in the community, and when time permitted he was devoted to it. He had sufficient knowledge of the basic sciences to explain many of the mysterious natural phenomena. He delighted to fish and hunt. The long country rides were not so humdrum for he saw with seeing eyes and hearing ears the marvelous wonders of wild nature everywhere. His office bore testimony to this in stuffed animals and birds; rare bird's nests, curious cocoons. Often an old bookcase housed a fine collection of Indian relics and geological specimens. Concerning them all he could talk most interestingly. Thus, this man of earlier days went about his mission of healing with senses alert to the lessons of the outdoors. His was a hard life, but what a reservoir of refreshment he found in the world of living and growing things. It sharpened his powers of observation and developed originality. The great outdoors was his laboratory where he obtained hints which often gave him a clue to original investigation and knowledge in medicine.

The type of physician I am now describing was the personification of a dignity which commanded admiration and encouraged friendly faith, but would not brook vulgar familiarity. Although everyone addressed him as "Doc" it was with difficulty that he could suppress a feeling of open resentment to the salutation. He condoned the act with the thought that the offensive abbreviation, frankly spoke the confidence and love of a plain people.

His clothing comported with his dignity. A long coat, an ample white shirt front, a low-cut vest, with watch-chain of ample proportions, gave him an air of distinction. His bearing and dress as plainly bespoke his profession as did

the garb of the itinerant minister or priest their calling.

He was a man of deep convictions and therefore it was to be expected that he would be an intense partisan. It was an age when partisanship thrived, especially in politics and religion. His most deep-seated prejudice, however, grew out of the profession he loved. Medicine was his religion and he brooked no tampering with its idealistic creed or traditions. To him the Hippocratic oath was to be kept inviolate. The code of medical ethics was the Hippocratic oath amplified and modernized. Any form of quackery was in his opinion anathema. His conservatism looked askance at radical departures from established methods of treatment. That a thing was new did not in his judgment justify its adoption. His view was that merit should be proved by adequate experience in conservative hands before giving general professional endorsement. In our own day he would be called a medical reactionary; and he would characterize much of our chasing after new things as medical Bolshevism.

He bled for most everything; gave mercury, quinin and other remedies in nauseating and heroic doses, and stigmatized those who dared to abandon these methods as destructive and erratic. *Pathies* and *isms* in medicine he opposed with furious determination. He would have none of them. He resolutely refused to consult with the followers of what he characterized as sectarian medicine. He fastened on them the term "irregular"—a term not unfamiliar to us even at this day. He was as outspoken in his medical convictions as was Jackson or Roosevelt in politics. Perhaps his prejudices at times blinded him to the truth, but his honesty and virility won many devoted followers and admirers. His very antagonism to medical sectarians won for them considerable sympathy and support. They charged him with "old fogysm" and were embolden to pose as progressives and founders of a "New School." He characterized them as pseudoscientific cults, seeking prominence and mercenary ends by short-cut methods.

As in our own time the old political and religious antipathies have softened, so in medicine has come a change. The rapid elevation of standards of medical education, requiring thorough grounding in the basic sciences underlying medicine, is doing much to relegate mercenary and erratic medical sects to the limbo of forgetfulness and ineffectiveness where they belong. In the consummation of these ends are

we not really coming into the full fruition of the hopes of the "Doctor of the Old School"? His sentiment was expressed in the words of St. Paul: "Prove all things. Hold fast that which is good."

In scientific and professional achievement this hero of the nineteenth century of American medicine wrought in a manner to excite unbounded admiration. Of his limited facilities he made the best possible use. His open mind saw and assimilated facts. His high aspirations and farsight enabled him to organize and plan for the future development of American medicine. Brief reference may be made to a few examples of his type. Behold McDowell, a pioneer in the wild Kentucky commonwealth, a pioneer also in the realm of abdominal surgery. Who in the history of medicine exhibited finer courage? In the face of prejudice he dared to do the supposedly impossible—performing the first ovariectomy. From farther in the Sunny South came that prince of clinicians, Austin Flint, whose later work as teacher and writer in the great eastern metropolis have made his name unforgettable in the history of medicine in our country. Pepper blazed the way for laboratory diagnosis in the East, as Senn and Fetterer made plain in the West the important relationship of pathology and morbid anatomy to diagnosis and treatment. Bobbs was the first to perform cholecystotomy, organized the profession of his state, and participated in the foundation of its first medical school. N. S. Davis, scholarly gentleman, distinguished writer and teacher in medicine, was greater still as the founder of the American Medical Association. This brilliant galaxy, capable of manifold enlargement, is yet sufficient to convince even the skeptic that in the nineteenth century of American medicine the "Doctor of the Old School" achieved in a manner worthy of the noble traditions and idealism of the profession.

The hero of this article is now almost a memory and tradition. There was much about him that we can ill afford to lose. In the bewildering whirl of modern life we may well pause to catch his brotherly spirit and sage wisdom. He was a Lincolnesque figure, born of the same time and possessing the same manly and heroic attributes. Not often a professor of religion he yet ministered to aching hearts and gloomy souls; he brought sunshine where there had been clouds. When he was called to that bourne from which travelers return not, it was not strange that gathered from near and far were those whose hearts were bursting with grateful

remembrance of his good deeds, and with eyes dimmed by tears of love and appreciation. He had been both oracle and sage of the community; its father confessor and most beloved citizen.

James Whitcomb Riley loved and admired this type of physician and has given him an imperishable place in literature. In conclusion, three stanzas from "The Rubaiyat of Doc Sifers."

One't in his office, settin there, with crowd 'o eight
er nine
Old neighbors with the time to spare, and Doc a-feelin'
fine,
A man rid up from Rollins, jes for Doc to write
him out
Some blame p'scription—done I guess in minute, nigh
about—

And I says, "Doc, you 'pear so spry, jes write me
that receit
You have fer bein' *happy* by—fer that'd shorely beat
Your *medicine!*" says I. And quick as s'cat Doc
turned and writ
And handed me: "Go he'p the sick, and putt your
heart in it."

He's jest a child, 's what Sifers is! And—sir, I'd
ruther see
That happy, childish face o' his and puor simplicity
Than any shape er style er plan o' mortals otherwise—
With perfect faith in God and man a-shinin' in his
eyes.

(To be continued)

INFLUENZA IN CHILDREN *

NETTIE B. POWELL, M.D.

MARION, IND.

The one great principle in the modern treatment of disease is the removal of the cause. The cause of infections cannot be removed after they occur, but a broad field of study of mechanism of infection, immunity, susceptibility, disinfection, sanitation, and quarantine lies before the thoughtful practitioner. Undoubtedly there exists in the undeveloped tissue of the growing child an increased susceptibility towards certain infections.

When an infection occurs we must not be secure in covering the condition with the accepted vague name of grip, Marasmus, etc., but must endeavor in every way to ascertain the true etiology. Dunn says, "The first object of treatment is to hasten recovery." It has been found, however, that in so far as the bacterial

infections are concerned there is no drug which can be safely introduced into the body, which will act directly on the micro-organism causing the disease, and that consequently there is no specific drug therapy for the disease caused by bacteria.

Influenza has the same importance in childhood as in adult life and it is worthy of special study because it exhibits a number of characteristic and important modifications.

We will give Spiegelberg's outline of the onset of the disease: "A marked distaste for food, facial expression anxious, eyes watery and sensitive to light, complain of headache, of being tired, show some fever, pulse rapid, general muscular tenderness. In very young children it may be ushered in by vomiting, convulsions or other symptoms of meningeal irritation, also intestinal disturbances, coryza and dry, hacking cough." Soltsman, in 1887, wrote: "Influenza in children does not begin with nasal catarrh, but with a retropharyngitis; the congestion is sharply defined from the unaffected tissue. Redness and cyanosis frequently appear in lines along the surface of the pharynx and later a fibrinous exudate is found which strips off. The entry into the system occurs through the pharynx."

The diagnosis of influenza in children is not always simple where there is no epidemic, but under conditions like our recent epidemic it is an easy matter. Keep in mind other diseases with similar symptoms; then the height of the fever, the extreme weakness, the typical appearance of mouth and throat, all tend to establish the diagnosis.

Cora B., aged 8, had a mastoid abscess with meningeal symptoms already present at time of my first call and died in twelve hours. An irregular practitioner had told the parents that if the rash, then present, cleared off in three days, it was scarletina, if it lasted longer it was scarlet fever and to call some one else. This is a fair example of the skin condition and we may be placing too little emphasis on that; dry, harsh, irregular papilla, urticaria, roseola—it is doubtful if these are results of mixed infection, but it is well to look to the proper nutrition of the skin.

"Albuminuria occurs in from 6 to 10 per cent. of children suffering from influenza," reports Dunn.

Anna G., aged 4; during October had a rash; physician called; diagnosis of scarlet fever, but it was all gone next day so they concluded the physician did not know his business and tele-

* Presented at the Indianapolis Session of the Indiana State Medical Association, September, 1919.

phoned him not to come back. In a few days she had a chill with high fever; physician called it influenza, as every one else had it, put the child to bed and no further complications arising, dismissed the case. But she remained tired and languid and a few weeks later drifted into my office. Edema of face and body present, also high percentage of albumin in urine. Rest and water and proper diet coupled with iodid of iron, put her on her feet, as there was no heart involvement; but this case demands urinary examination for a long period.

Personally, I have had few cases of pyelitis in this recent epidemic; however, it is a routine practice of mine in all febrile disturbances in infancy not clearly accounted for, to suspect urinary infections and look for pus; as mortality is higher in cases where albumin is present. If these conditions are present it means the same care as after any other infectious disease, watching that dilatation of the heart does not occur.

Influenza, according to Koplek, shows a close similarity to diphtheria in its effect on the enervation of the heart muscles. In the early stages this is shown by arrhythmia and tachycardia. This relative heart weakness must be borne in mind for a long time in severe cases; true and even severe endocarditis has been observed after influenza.

Roy F., aged 4; this case was referred to me in March with history of influenza during the October outbreak. He was very ill, developing a true pneumonia, since which time has had asthma. Patient was very weak and anemic with all cervical glands enlarged, purulent mucous from nose, harsh bronchial breathing over entire chest.

DeBuys says, "When the abnormal breathing is the same over the entire chest, then the irritation is high up in the large bronchi and the lung acts as a sounding board." Judged by this, our boy was trying to clear up the mucous but not succeeding well as he was absorbing too rapidly. A tonsillectomy was advised and done; also a badly adherent prepuce taken care of as this is so often a source of irritation.

Bell of Tulane, in a recent lecture, said: "Tell your patients they will not be well for two years." That would give you long care of these cases and insure a perfect cure; only so can we hope to prevent the development of tuberculosis in rapidly increasing numbers.

Gastrointestinal symptoms were not formerly regarded as a part of the clinical picture of influenza. The earlier writers regarded it only as an infectious catarrh of the upper air passages.

Now the digestive apparatus plays an important part in young children and infants, and in many cases the whole course of the disease may simulate an acute febrile gastrointestinal inflammation. Loss of appetite, vomiting, diarrhea, are marked symptoms; the stools are fetid, more and more frequent, or there may be transient constipation. The intestinal symptoms may be so severe as to simulate typhoid, and continued, prepare these parts for the development of secondary infections and the resulting systemic toxemia.

Leonard R., aged 3; case reported as scarlet fever; on tenth day after quarantine was established he had a very high fever with exanthemata more intense than at the beginning. The glow gradually faded but a condition of colitis developed, running a fourteen-day course; he also had persistent cough with moist râles but no pneumonia. This dry, severe, racking cough is characteristic and may simulate the paroxysm of pertussis; some authors speak of pseudopertussis and this continues well into convalescence.

The convalescence of this case was long. About three weeks after the close of the fever he had a fall, probably injuring his left hip, although there were no physical signs. Yet after this he refused to walk or in any way use this leg, while now, after eight months, he drags his foot.

The great frequency of inflammation of the middle ear is a notable feature in the pathology of childhood. Three-fourths of all cases are unilateral. Mastoiditis is not an uncommon termination. Nearly every child suffering from influenza complains of more or less earache.

H. B., aged 3; had a severe tonsillitis with high fever, when his sister, reported above, died of meningitis. He developed a mastoiditis which was operated early and no other complications except anemia, which is so often present in these cases.

In meningitis developing with influenza we have the same symptoms as with other infections of meningitis: rigidity of neck, and Kernig's sign present sooner or later.

I have had four cases, following influenza infection, of nerve involvement simulating poliomyelitis and St. Vitus dance.

1. Leonard R., who still drags his left foot.
2. Nina, aged 11, who, following a slight attack, at which time no physician was called, began to be unable to coordinate, could not put a glass of water to her mouth and all motions very intense.

3. Helen C., aged 12, had endocardial involvement, chronic movement, some hallucinations. A tonsillectomy was done, some bad teeth cleaned up, general hygiene and dietetic régime outlined and yet after six months, very little mental improvement.

4. Aneoni De B., aged 3; this little sufferer was brought to one of the throat men and referred by him to me; history of influenza, large infected tonsils, rheumatic, swollen wrists and spastic walk. A tonsillectomy was done to help clear her up, and an intense and rigid régime put over to keep her out of the hands of the chiropractor. Just today I saw her, pretty, black-eyed girl, full of pep.

In the September number of the *American Journal of Diseases of Children*, Montgomery and Dunham give the laboratory findings of cases at the Harriet Lane Home, Johns Hopkins University, during the influenza of October, 1918, in infants and children. Eighty-one cases were followed carefully; of course these were the critically ill. Seventeen were under 1 year old. There was in general an absence of leukocytosis, particularly in the uncomplicated cases. In 50 per cent. the leukocyte count on admission was 6,000 or under at about normal levels, while those complicated by pneumonia had a higher count.

Their conclusions are:

1. The tendency in uncomplicated influenza in infants and children is toward a leukopenia, rather than a leukocytosis.

2. There is a tendency to a slight leukocytosis in complicating pneumonia.

3. In this series, in all pneumonia cases resulting fatally the leukocyte counts were under 10,000.

4. The prognosis in general is better in pneumonia cases which exhibit a leukocytosis.

5. Differential counts have shown: (a) tremendous variation in the differential formula, and (b) nothing sufficiently constant to be of clinical aid in diagnosis or prognosis.

These conclusions show that isolated physicians without laboratories are not handicapped in their care of patients.

One lesson to learn from these sequelae is that the general condition of the patient needs our first consideration. They are anemic, flabby, as though suffering from anhydremia, so especial attention must be paid to quality of food and quantity of water; in other words, the hygienic care must receive attention, then by preventing any further involvement, the little patient continues to fight for health.

CLINICAL MANIFESTATIONS AND SEQUELAE IN INFLUENZA *

CHARLES P. EMERSON, M.D.
INDIANAPOLIS

Mr. President, Members of the State Medical Society: The pandemic which has just passed over this country, attacking in some communities at least 30 per cent. of all individuals (and probably a higher percentage than this since not many of the mild cases would be recognized), killing about 4 per cent. of these, complicated with pneumonia in about 15 per cent. of those affected, of whom about 33 $\frac{1}{3}$ per cent. died, does indeed deserve our careful study, not so much because of the evil it has done, but because of its sequelae which must now be treated and of its possible return which is to be feared. The problem is not one of the past, but of the future. If it is true that this epidemic is likely to return this autumn and the coming winter, then we as physicians should give our patients as well as the community in which we practice our best advice and assistance to prevent a repetition of the horrors of last winter.

Will it return? It has already reappeared. Can we prevent it? No, but we can lessen its ravages.

Let us review some of the important features of the past epidemic. We call it "la grippe" or "influenza," but its popular name, the "flu," although an objectionable abbreviation has certain advantages and may in the long run prove more accurate. This term has been used and very widely of this epidemic and of this only. We do not yet know that this disease is due to the same organism or organisms as those of past years called la grippe or influenza, and until we are certain on this point it would be a mistake to identify it with them even in name. The flu certainly is a very acute infection with an incubation period of two days; it is evidently very contagious and would seem to be spread by those whose symptoms have not yet appeared. In other words, it is during the few hours before a man knows that he is sick that he spreads the disease to others, and once sick he is no longer a source of danger to others. The onset is fairly sudden, and the chief symptoms are malaise, headache, nausea, anorexia, vomiting, and a hard, often dry, cough so severe as sometimes to rupture the lung. Of the many physical signs two deserve emphasis: the flaming throat, especially the flaming hard palate;

* Presented at the Indianapolis Session of the Indiana State Medical Association, September, 1919.

and the leukopenia, the white blood cells numbering seldom over 4,000 to 5,000, and sometimes not over 2,000, two signs sufficient for diagnosis even in those who feel quite well. The course of the disease is limited to from four to nine days as a rule, and if the disease lasts longer than eleven days we may be sure it is not alone the flu but also a complication with which we have to deal. That the convalescence is usually slow and often accompanied by definite depression, most will agree, but that it is masked sometimes by an euphoria which is just as truly pathological as the depression is often not understood. The cause of this disease is as yet unknown, but its complications and sequelae are certainly pyogenic in character and often due to organisms of the streptococcus group.

Some of the special features presented by our cases are: First, a cough, dry and severe, so severe that it sometimes ruptures the lung, which it did in two cases at the Robert W. Long Hospital. The lung ruptures but the pleura does not, so pneumothorax does not arise; but the air dissects its way along the bronchi to the hilum of the lung, to the mediastinum, up to the neck, out into the subcutaneous tissue through the suprasternal notch, and from that point over the entire trunk and limbs, even to the knees.

Another point of special interest is the interstitial pneumonia which has been such a striking feature in many cases. The ordinary acute croupous pneumonia is a surface disease just as diphtheria is a surface disease. The alveolar epithelium of the lung is a surface membrane, and in acute lobar pneumonia this membrane is inflamed and the air spaces fill with exudate, but the lung tissue itself is only congested and therefore after the exudate is absorbed and expectorated the lung is soon quite normal. The interstitial pneumonia of influenza, on the other hand, is only in part a surface disease; it is also an infection of the interstitial pulmonary tissue. While the air cells may empty themselves by autolysis, the interstitial tissue cannot; the exudate within the lung tissue, in part at least, becomes organized, forming masses of scar tissue which cannot but have a future importance. We cannot make out this pneumonia on physical examination nearly as well as ordinary pneumonia and so are apt to overlook it.

This pneumonia is well illustrated by lantern slides of the roentgenograms of the lungs. The first four slides are of a young woman admitted with flu and interstitial pneumonia; the second

of these was taken on the fiftieth day of her disease. You will note that the interstitial pneumonia is almost as marked in the first slide. The third slide was taken eight months later. You can see that her chest is contracting, not so much because of the slight pleurisy which was present, but because of the contraction of the interstitial tissue developed within the pulmonary tissue leading to pulmonary cirrhosis. This girl had a long and severe case. Its sequence was: flu, interstitial pneumonia, abscess of the lung, empyema (the pus removed by aspiration), fibrinous pericarditis, myocarditis, empyema of the frontal sinus, acute nephritis. She is now well with the exception of a slightly contracted lung.

The next case is that of a young woman who ruptured her lung by coughing. In the olden days before chloroform was used we are told that it was a not uncommon complication of parturition for women to rupture their lungs by their straining efforts. In her case the air appeared as usual at the suprasternal notch and the subcutaneous emphysema covered the upper chest. In another case in the hospital at the same time, a young man, the emphysema spread to the lower abdomen. Both recovered. This lantern slide shows also a definite peribronchitis of the lower lobes. These cases are very often mistaken for tuberculosis. They certainly have for a while at least all the clinical symptoms of tuberculosis and while they have not the physical signs they do have the shadows in the roentgenograms which might be mistaken for that disease. It is well in such cases to remember the aphorism that "if the lesion involves the lower lobe you must prove it is tuberculosis, if it involves the upper you must prove that it is not."

This third case illustrates a group which demands our most careful attention. In these patients the flu and its complications activate a latent or apparently cured tuberculosis. Physicians who make a specialty in that field agree that their offices and the sanatoria are now overfilled with these patients whom they had supposed were practically well, but whose tuberculosis has flared up to a dangerous degree. One very interesting point in the case of this girl, a slide of whose lung you now see, who died recently in the hospital and whose lungs at necropsy showed the lesions of interstitial pneumonia together with extensive active tuberculosis with widespread cavity formation, is, that following a typical attack of flu she was for weeks in the wards with a high, continuous fever, but for fifty-two days she was not heard

to cough even once, and although the physical examination and the roentgenograms showed extensive pulmonary disease she could raise no sputum. On the fifty-second day, however, she began to cough and three days later her sputum contained abundant tubercle bacilli. The many cases in this epidemic of extensive bronchopneumonia who did not cough or who coughed very little and whose sputum, if they had any, contained neither blood nor blood pigment, has thrown new light on the importance of the condition of the bronchi in cases of the pneumonia group.

The next group of five cases illustrated by lantern slides is one deserving very careful study. It is that of the cases with metastatic infections, especially empyema and lung abscess. The flu cases are complicated not only by pneumonia but by infections in various parts of the body: abscess of the lungs, empyema, cholecystitis, parotitis, nasal sinusitis, acute nephritis, etc. In fact, each area of interstitial pneumonia is a potential miliary abscess. Small lung abscesses are quite common. Evidently they evacuate themselves through the bronchial tree. One developed into a large pulmonary abscess. Some of these abscesses lead to interlobar empyemas, others rupture into the general pleural cavity giving you the more usual form of empyema. In more cases the pulmonary infection probably has involved the pleural cavity by direct extension.

This next lantern slide is one of a roentgenogram of a woman whose flu led to pneumonia, then to abortion, then lung abscess, acute cholangitis and acute nephritis. She recovered. Nine months have passed and this woman is now quite well.

The next two lantern slides of two other cases show a very definite lung abscess which developed after metastatic pneumonia.

The next slide is of a man with interstitial pneumonia, a lung abscess which perforated into the pleural cavity, resulting in empyema. This man suffered severely during this illness also with myocarditis, acute cholecystitis, acute appendicitis, and a definite psychosis. He recovered.

In conclusion, we have shown slides of seventeen roentgenograms of eleven cases of flu, chosen to illustrate common complications and sequelae. The flu is an acute infectious disease; its complications and sequelae are for the most part pyogenic and may involve almost any organ of the body in the nature of a true pyemia. One point to emphasize is that nearly every one

of our cases who survived the bronchopneumonia, with the exception of those who developed active tuberculosis, got well even though they presented multiple infections. The prognosis of these complications certainly is good provided we are aggressive enough to attack each complication, surgically if necessary, as it arises.

But what of the future? Our first problem is to clean up the traces of the past epidemic. Every patient who has had the flu should be examined carefully for traces of the disease. There may be considerable interstitial pneumonia in the lungs of the patient who feels well and has not one symptom suggesting pulmonary disease. Such a patient should lead a very guarded life for months. The nasal sinuses were infected in over 90 per cent. of the flu cases which came to necropsy. Surely many of those who recovered will have sinus disease needing operation, and tonsils which should be removed. Now is the time to preach the simple, methodical life, good food, good sleep, fresh air, etc. The flu is almost over, but the pyogenic streptococcus infections remain and these organisms must have a nidus in which to live, and to clean out that nidus now is our duty.

MORBID ANATOMY AND BACTERIOLOGICAL FINDINGS IN EPIDEMIC INFLUENZA *

(EPIDEMIC OF AUTUMN, 1918; CAMP ZACHARY TAYLOR)

E. N. KIME, M.D.
INDIANAPOLIS

This report is based on a study of the records in the first hundred consecutive necropsies, performed under ideal conditions from the very beginning and covering a period of four weeks. The case histories show remarkable constancy in details pertaining to age, sex, race, onset, clinical course and early termination. The clinical picture conformed closely to that which was universally present throughout the country at the time. Almost all the patients had received the same routine treatment, but in the few cases in which special methods, such as oxygen inhalation and the exhibition of various sera and vaccines had been tried, death occurred about as soon and postmortem lesions were comparable to those of others examined at about the same period of their disease and of the epidemic.

* Presented at the Indianapolis Session of the Indiana State Medical Association, September, 1919.

Routine gross and microscopical study of tissue changes, and routine bacteriological examinations were conducted by three different specially trained teams and permitted of thorough investigation of various lesions which developed at different stages of the epidemic.

TIME OF THE EPIDEMIC

First manifestation September 22; height, October 1, and termination about November 15. Pneumonia reported on an average of six days after onset, and death after about four days of pneumonia. Average duration eleven days. About one fourth died during the first week, half died during their second week, and the rest within the last two weeks (18 per cent. and 7 per cent., respectively, for the third and fourth weeks of the disease).

RELATION OF DURATION OF THE DISEASE TO PERIOD OF EPIDEMIC

The average duration during the first week of the epidemic was nine days, and for the second, third and fourth weeks it was nine, twelve and seventeen days, respectively. This increase in duration of life as the epidemic progressed is probably due to the early death of the most susceptible.

MORBID ANATOMY

A brief presentation of the chief lesions generally present throughout will be followed by an account of the salient features met with during each successive stage or weekly period.

External appearance: All were of average height and weight. Extreme lividity common. Early in the epidemic profuse serosanguinous fluid exuded from mouth and nostrils. The chest was often expanded, in some unequally. The skin over the chest showed in about 20 per cent. of cases, small discrete papules, microscopic examination of which showed chiefly toxic necrosis of the sebaceous glands. In about half the cases petechial or ecchymotic patches appeared in the skin of the axilla and back, often masked by the lividity. Microsection showed marked congestion and subpapillary hemorrhages. Jaundice occurred in 10 per cent. of cases. The subcutaneous tissues were generally negative. Two cases of widespread subcutaneous emphysema in which direct connection via the visceral space of the neck could be established with the mediastinum and peribronchial areolar tissue. Anaerobic bacilli not present. Probable cause, erosion of the wall of a small bronchus or bronchiole. Zenker's coagulation necrosis and hemorrhagic exudation in

the rectus abdominis muscle were demonstrated in two cases.

General internal examination: Abdominal cavity negative except for downward displacement of the viscera. Peritonitis not present.

Blood vascular system: Hemorrhage, congestion and edema almost universally present in early cases, as also proliferation of the endothelium of arterioles and occlusion of the lumen of venules by packed red cells, in some unchanged, in others as conglutination or hyaline thrombi. Polymorphonuclear mobilization rare, lymphocytic infiltration common early findings. Intima of larger vessels tinted with hemoglobin and occasional acute atheroma not affecting the superficial layer of the intima. Pericarditis with effusion in seven, purulent in one. Petechial hemorrhages common. Moderate dilatation of right heart and flaccidity of ventricular musculature in about half the cases. Microscopic examination showed acute toxic degeneration and vacuolization of the heart muscle.

Respiratory system: Hemorrhagic inflammation of the entire tract. Congestion and supuration of the nasal accessory air sinuses in over 90 per cent. of cases. Laryngeal congestion, and hemorrhagic tracheobronchitis present in approximately 100 per cent. of early cases. Smaller bronchioles frequently affected in the same way. Peribronchial lymphoid tissue swollen and congested at first, later soft and puriform. Microscopic examination showed congestion, edema and catarrhal inflammation in most of the cases and in many frankly hemorrhagic exudation.

Pleura: Involvement of one or both sides in about three-fourths of the cases. The exudate was thin and brown at first, later almost or quite purulent, was the rule. Subpleural edema and petechial hemorrhage common.

Lungs: Although every case showed some lesion, in many cases it was not sufficiently extensive to be considered the cause of death. Both lungs were involved in about 90 per cent. of the cases, the left side slightly more often than the right, and lower lobes somewhat more than the upper. The right middle lobe was least affected. Marked increase in weight as a rule due to inflammatory edema. Nonconsolidated portions filled with bloody froth. Consolidated areas more frequently posterior and lobular, later spreading anteriorly and becoming confluent and still later pseudolobar in type. Anterior edges of lung always feathery even in the lobe or lobes involved. Three types of pictures microscopically—the first catarrhal appearing

most frequently in the early part of the epidemic, the second fibrinocatarrhal seen a little later, and the third fibrinopurulent or purely purulent seen later and towards the last. However, frequently not only in the same case but even in the same section evidence of a mixture of all three of these types of process could be seen. The essential process, however, seemed to be in the proliferation of the pulmonary epithelium associated with vascular changes and lymphocytic infiltration, other lesions or complications with other lesions may be attributed to secondary invading organisms.

Spleen: Enlarged in about three-fourths of cases, markedly enlarged in about one-third. Usually soft, mushy and bloody. Trabeculae and follicles not prominent. Reticular necrosis, endothelial hyperplasia and toxic degeneration of the blood vessels and germinal centers in microscopic sections.

Semilunar ganglia: Gross congestion and microscopically toxic changes in the ganglionic cells, vacuolization and nuclear extrusion.

Kidneys: Generally enlarged, soft and congested. Microsection showed degeneration and destruction of tubular epithelium, granular deposits in the lumina of the tubules, and interstitial congestion and edema.

Suprarenals: Marked congestion in many, frank hemorrhage in three and petechial hemorrhages in fourteen cases. Cloudy swelling and edema.

Gastro-intestinal tract: Submucous hemorrhages in stomach small and large intestine in a few cases. Moderate lymphoid hyperplasia of the lower ileum and transverse colon, showed as minute discrete papules on a congested background, present in about half the cases.

Liver and pancreas: Larger than normal in about 90 per cent. of cases. Congestion and cloudy swelling, especially in the liver. Microsection of the liver showed focal necroses (central) in about half the cases, and occasional toxic degeneration of the Islands of Langerhans in the pancreas.

Central nervous system: Meninges congested in nearly half the cases, but definite hemorrhagic pachymeningitis was seen only once. The common early picture was that of acute sero-lymphatic meningitis characterized microscopically by infiltration of the tissues with mononuclears and the entire absence of either polymorphs or fibrin. Purulent leptomeningitis developed toward the last, partly pneumococcic and partly meningococcic in origin.

Brain: Uniformly congested, and heavier than normal. Focal hemorrhages minute in size

found often in cerebrum but seldom in the brain stem. Degeneration of ganglionic cells of cortex, and pericellular edema almost constant findings.

Glands of internal secretion showed uniformly congestion and edema. Hypercolloidism of the pituitary and absence of spermatogenesis in the testicle are noteworthy.

Middle ear: Suppurative in one-fifth of cases, seldom present at first but in the latter part of the epidemic rather frequently found.

Eyes: Hyperema and conjunctivitis common.

BACTERIOLOGIC FINDINGS

Routine cultures of all body fluids, heart's blood, both lungs and spleen taken throughout, and from nasal accessory air sinuses and brain in over three-fourths of the cases. Each culture checked by simultaneous smear of the same material. Strict criteria as to the nature of the micro-organism encountered were established. All pneumococcic cultures were proven to be bile soluble, all hemolytic streptococci were rejected if not hemolytic in vitro, type determination was conducted on both pneumococci and meningococci, and the *B. influenzae* were proven to be not only minute gram-negative pleomorphic forms but were demonstrated to be hemophilic and incapable of growth at room temperature.

Seldom did any of these forms occur in pure culture throughout the body, but were frequently recovered pure from one or more organs. The findings for each week in the order of their predominance are as follows:

First week: *B. influenzae*, pneumococcus, non-hemolytic streptococcus, micrococcus catarrhalis group, and hemolytic streptococcus.

Second week: Pneumococcus, nonhemolytic streptococcus, *B. influenzae* and hemolytic streptococcus.

Third week: Pneumococcus, nonhemolytic streptococcus, *B. influenzae*, hemolytic streptococcus, staphylococcus and meningococcus.

Fourth week: Same as third.

Type determination of the pneumococci showed that 60 per cent. belonged to Group 4. This corresponded fairly closely with the figure obtained from bronchial exudates cultured just before the outbreak of the epidemic, which showed 70 per cent. belonging to Group 4. The next most frequent type was Type 1, 18 per cent.

Type determination on the meningococci showed them to belong to an intermediate or "wild cat strain," also found to be endemic in this camp.

CORRELATION OF PATHOLOGIC AND
BACTERIOLOGIC PICTURE

First week: The predominant lesion both on gross and microscopic examination of all tissues was hemorrhagic inflammation and edema. Proliferative processes in epithelial, endothelial and lymphoid tissues associated with inflammatory edema were common. Polymorphonuclears uncommon. Pleuritic fluid not present at first but developed in the latter part of the week as a thin, bloody, nonfibrinous exudate. Typical microscopic picture in the lung showed extreme hyperemia, conglutination thrombi, in interalveolar tissues and capillaries,¹ catarrhal inflammation of the bronchioles and alveoli packed with epithelial and mononuclear cells, but few pus cells and very little fibrin. The areas of consolidation of the lung were most frequently lobular, peripherally located and often firm nodular almost shot-like on palpation and comparable to infarction. Bacteriologically the influenza bacillus predominated, but pneumococci and nonhemolytic streptococcus were also present. *B. influenzae* occurred in 50 per cent. of all cases and predominated in one third. It was present in pure culture in the heart's blood in 18 per cent. of cases, and in pure culture in the spleen in 15 per cent. of cases.

Second week: Hemorrhagic lesions less manifest but congestion uniformly present in all tissues. Pleuritic effusion thicker and contained flakes of fibrin. The lungs showed more confluent pneumonia and microscopically less catarrhal and more fibrinopurulent processes. Nasal accessory air sinuses almost universally congested, and suppurative in many cases. Meninges and brain edematous and congested. Microscopic picture serolymphatic meningitis and hyperemia of the brain tissue.

Predominating micro-organism: Pneumococcus, Type 4. Most often organism found in bronchial tree, confluent consolidations of the lung, pleuritic effusion, heart's blood and head. The nonhemolytic streptococcus second and running a fairly close race. The *B. influenzae* third in frequency with only 15 per cent. of all examinations. Pneumococci predominate in 75 per cent. of the cases.

Third week: Bronchial exudate, pleuritic fluid and nasal accessory air sinuses definitely more purulent. Purulent leptomeningitis appeared in about 30 per cent. Lung lesions more confluent, often pseudolobar with tendency toward suppuration in the bronchioles and peribronchial lymph nodes. Microsections show in addition to toxic degeneration of epithelial tissue and nerve cells, focal necroses of the liver

and polymorphonuclear infiltration of lungs, peribronchial tissue and bronchial tree.

Predominating micro-organism: The pneumococcus still in the lead and is universally present in pseudolobar lesions of the lung, and in the pleural cavity, heart's blood and cranial accessory air sinuses. The nonhemolytic streptococcus found more frequently in lobular lung lesions, displacing the influenza bacillus which is scarcely to be found at all. Staphylococci found in lung, meningococci in the head.

Fourth week: Lesions similar to those seen during the third week except that the lung shows more lobar lesions, some almost typical except that in other lobes lobular or confluent lobular lesions could be seen. Cranial air sinuses still purulent. Otitis media and purulent mastoiditis had developed to over 50 per cent. One case of pneumococcal hemorrhagic pachymeningitis. Meningitis due to meningococcus in about 30 per cent. of cases. Pneumococcus still predominant but closely followed by other secondary organisms, even the *B. influenzae* appearing to gain fresh virulence but to nothing like the extent shown in the first week.

DISCUSSION

Although the *B. influenzae* predominated in total findings in the first week it occurred in pure culture in every organ in only one case, which differed from others only in a more marked flaccidity of the heart and a somewhat more marked congestion and edema of the brain. The lung showed fibrinocatarrhal pneumonitis. Another case showing a pure culture of the pneumococcus showed much the same picture. All other cases presented such a mixture of bacteriologic findings that scientific correlation of single lesions with single organisms, such as has been accomplished by McCallum,² was with us impossible. The endemic flora was of such a nature that the underlying morbid process was more or less modified by the invading or commensal organisms.³

The earliest picture in postinfluenzal pneumonitis was largely catarrhal and is ascribed tentatively to the activity of the *B. influenzae* since it was the most predominant organism present, although probably acting symbiotically in conjunction with the nonhemolytic streptococcus. The next picture, fibrinocatarrhal, was probably due to the pneumococcus, while the later suppurative processes were occasioned by these two in conjunction with hemolytic streptococcus and staphylococcus. The still later process of interstitial fibrosis and organization was not seen, probably because it had not had

time to develop. It seems logical to account for the diversity in the lesions and bacteriologic findings by the assumption that whatever the initial virus the epidemic as we saw it at Camp Taylor was the manifestation of a malignant symbiosis between several different organisms, all or most of which were known to be endemic in that vicinity.⁴

CONCLUSIONS

1. Influenza lesions are widespread and severe. Lung lesions, while most spectacular, form a relatively small part of the entire picture.

2. The morbid anatomy and bacteriologic findings vary with the stage of the disease, and depend largely on the nature of the endemic flora. Early fulminating lesions seem to be associated with a predominance of *B. influenzae* but as the disease progresses other commensals appear and a composite pleomorphic picture results.

3. Early diffuse toxic or hemorrhagic lesions are manifest in the skin, mucous membrane of the respiratory tract, serous membranes of the chest and head and parenchymatous tissues of the entire body. Toxic degeneration of the blood vascular tissues, hyaline and conglutination thrombi and inhibition of hematopoiesis (leukopenia).

4. Pulmonary congestion and edema in almost every case and in addition to vascular changes, catarrhal exudative and lymphocytic processes are essential early phenomena. Fibrinopurulent and suppurative exudates are most frequent in confluent and pseudolobar lesions.

5. The influenza bacillus is not present in sufficient numbers to incriminate it as the primary cause, but is seen often enough to consider it as the chief indicator of the epidemic and one of the most important members of the malignant symbiosis which is responsible for its fulminant nature.

I wish to express my grateful appreciation for the assistance of Major Fox, who directed the work, and for the collaboration of Drs. Lucke and Wight, who made the histologic and bacteriologic examinations, and who continued and finished the work which, because of military exigency, it was necessary for me to leave unfinished.

BIBLIOGRAPHY

1. LeCount, E. R.: Disseminated Necrosis of Pulmonary Capillaries in Influenzal Pneumonia, *J. A. M. A.* (May 24) 1919.
2. MacCallum, W. G.: Pathology of the Pneumonia following Influenza, *J. A. M. A.* (March 8) 1919.
3. Griswold, Meyer, Wight, Kime, Fox, et al.: Proceedings Joint Meeting Camp and Base Hospital Surgeons, Camp Taylor, Oct. 24, 1919.
4. Lucke, Wight and Kime: Pathologic Anatomy and Bacteriology of Influenza, *Arch. Int. Med.*, Vol. 24, No. 2 (Aug. 15) 1919.

DISCUSSION ON PAPERS OF DRS. POWELL, EMERSON AND KIME

DR. F. B. WYNN, Indianapolis: There certainly is not a group of subjects more important to us in Indiana at this time than this which has been presented to us this morning—first in the paper of Dr. Emerson, and then in the bacteriologic consideration of Dr. Kime—certainly most instructing and illuminating.

I am very prone at this time to acknowledge my age by stating that I was privileged to enjoy (?) the epidemic which prevailed in 1890-1892, which in some respects varied from that through which we have passed in the last two years. I may be pardoned for referring to some of the conditions as I recall them, not many but one or two. 1. That the former epidemic was characterized by a degree of aching which has not been prevalent to the same extent in this pandemic. In the former epidemic the aching was a bone-breaking ache. 2. I recall that while in the onset, or the rapidity of onset and the universality of the infection, taking everybody in its course, the two epidemics were similar, in the epidemic of 1890-1892 we had not nearly so many cases of severe sequelae, notably not so many cases of pneumonia—I think not one-tenth as many cases of pneumonia as in the recent epidemic.

Many have raised the question in considering this pandemic as to whether or not it is the same as that which occurred back yonder. There are slight differences as I have mentioned—there was a very much greater prevalence of empyema in this pandemic as compared with the former, in which there were very few cases. Yet I believe in the essential features they are very much alike. Let me recall also another peculiarity of the former epidemic which I have not noted to any great extent in this, and that is that in the early epidemic we had many cases of intestinal influenza, while this time we had nothing like as many.

I only want to say that I believe the epidemics are essentially due to the same cause. I will not take time to go into the question as to which is the dominant organism entering into the symptom complex which we call the flu, but I do want to refer to an article recently written by Biggs in which he called attention to the fact that in the epidemic back yonder the high death rate from complicating features was greater the second year than it was the first. The death rate from pneumonia, from organic heart disease was much greater in 1891 and 1892 than in 1890. And reasoning from that we have good reason to expect, as Biggs believes, as other public health authorities believe, and as clinicians who have studied the subject believe, a great deal of disease affecting the various organic structures and of quite serious nature—pneumonia, empyema, bronchopneumonia and all

those sequelae which the first essayist has called attention to, during the coming fall and winter.

Dr. Emerson has laid stress on what I think is true, namely, that in the pandemic which has just closed, so far as pulmonary symptoms are concerned the most serious cases were those in which there was not a frank, lobar pneumonia, but a process which was more or less diffuse, affecting both lungs, involving in the beginning the mucous membrane of the bronchial tubes and somewhat later the peribronchial structures. In other words, the infection in the main in the serious cases was a peribronchitis, and it seems to me that, as the pathologist has shown in the 170 necropsies at Camp Taylor and as many of you have seen at the necropsy table, this bronchitis, plus peribronchitis with lobular pneumonia, sometimes resembles a case of lobar pneumonia.

The two things to which the third paper calls particular attention are very instructive to us. In all the cases at Camp Taylor and in the necropsies made the thing impressed on the mind of the pathologist was (1) the hemorrhagic extravasation, the petechial hemorrhages everywhere through the body; (2) the congestion and edema common, particularly in the course of the more serious cases. What interpretation are we to put on the fact of this diffuse edema and the hemorrhagic extravasation? To my mind it is, that whatever the underlying organism, whether it was a symbiosis of the various organisms does not matter, we know there was liberated in the early course of these cases a very severe toxemia, a malignant toxemia, and the hemorrhagic extravasation and the edema coming early were not so much the result of the infection as a malignant intoxication, a severe toxemia; also that that toxemia acted in various ways, not merely in the hemorrhagic extravasation and edema, but manifested also in cutaneous disorders. Clinically, some of these cases very closely resembled erysipelas. Dr. Kime states that the dominating organism in the second and third week was the streptococcus.

Now let us get into our minds, that in the early history of these cases, in the first week, the manifestations were essentially those of a malignant toxemia; that toxemia leads to edema, to hemorrhagic extravasation and perhaps to a fatal issue in a short time. Suppose these patients survive the first few days of the disease, then what happens? Take, for example, in the course of the respiratory tract, one of the things which happens is the destruction of the protective epithelium of the bronchial tubes. The toxemia which produces an erysipelas-like rash of the skin produces destruction of the epithelium covering the bronchial tubes, and when these mucus-producing structures are destroyed the protective agency of the body is largely destroyed. You can readily see how in many

places the epithelium would be denuded within the bronchial tubes, and given such a condition there is an exposed submucous structure, a field laid bare for the growing of streptococci and for the distribution of organisms causing peribronchitis, interstitial pneumonia, etc. I think that we have been impressed in this pandemic more than in the former with the fact that the number of sequelae is much greater, and some are rather unusual. It seems to me that this time we are getting quite a group affecting the nervous system, particularly the peripheral nerves. I have seen quite a number of cases of severe peripheral neuritis, unlike anything I had ever seen. So we may expect not only the ordinary things during the coming winter—pneumonia, bronchopneumonia, etc., but a great many nervous disorders develop in the wake of this pandemic which has prevailed the last two years.

The question of tuberculosis has already been raised, and I think in the next few months we may look for a great increase in that direction. I want to underscore and emphasize what the first essayist said in regard to the necessity of preparing people whom we know have had severe types of so-called flu—preparing them for the possibilities which may arise during the coming winter. That is, to look after these things in due season. If there are bad tonsils, if there is infection any place that is the weak spot and now is the time for you to counsel them that they put their house in order for anything which may come on them during the coming winter when there may be revival under climatic conditions of the opportunity for reinfection, stirring up a latent trouble which is present. This applies especially to tuberculosis. Let us therefore get our patients in as good shape as possible before severe weather comes when they are housed indoors and infection is likely to occur again.

DR. VIRGIL H. MOON, Indianapolis: I do not know what has been brought forward by Dr. Kime in his discussion of the bacteriology and pathology of influenza, because I was not able to be here in time to hear his paper. But I think probably his findings would pretty closely corroborate the findings we have made in Indianapolis in the same conditions. I will say that this is probably one of the most serious diseases we have met. It is serious for this reason, that the body fails to recuperate, to come back to the normal in a reasonable length of time. The pathology which we found in the cases who have died immediately following or during the acute attack is a modified form of pneumonia, a pneumonitis; but we find in cases that have lived through the acute attack, who have gone through a stage of convalescence more or less protracted—which I have no doubt Dr. Emerson has described to you—that long period in which the patient fails to come back to his nor-

mal health and vigor, if that patient dies some time subsequently, possibly from some entirely foreign cause such as a railroad accident or an acute infection of the gallbladder or something else entirely unrelated to influenza, and if we hold a necropsy on that body, we are astonished at the condition of the lungs, the failure of the lungs to return to their normal condition, and there will still be these scattered areas more or less confluent, not distinct in outline, not sharply marked areas, which microscopically and grossly have the same characteristics as those we examined in the patient who died during the acute attack. So the failure of the lung to return to normal is one of the salient pathologic features in this so-called influenza.

It has been my fortune to see at postmortem examination the lungs of several cases in which a latent tuberculosis had spread widely throughout the lung in this condition of weakened resistance—a latent tuberculosis which had not been diagnosed preceding the influenza, but which had become very widespread and which, as Dr. Wynn has suggested, is a condition we may look for clinically.

DR. CHARLES H. GOOD, Huntington: It seems to me that with the condition we had in this country last year we ought to discuss this question and go back to our homes with at least something new to fight this condition, because we can all prophesy that we will have a recurrence this year.

As far as treatment is concerned, we all know prevention is best, and in my opinion masks and isolation is better than anything else. The etiology is still unknown, we are still at sea, but with rest in bed, not too much fresh air, a building up treatment, my experience is that the prognosis is good. But considering the severity of the epidemic last year, I think this question should have full discussion.

DR. CARROLL C. COTTON, Elwood: It does not seem to be within the scope of these papers to go into the treatment, but I notice that Dr. Emerson said to operate these patients all that seemed necessary. He spoke incidently of one case of empyema and of aspirating. In my observation of these cases, aspirating would hardly be sufficient for the empyema.

This complication is frequent in children. I remember one case I had in a child that we operated the day the child was 1 year, 3 months and 7 days old. We operated by incision and used a drainage tube, operating on the eleventh day of the sickness. Another child was operated on the eleventh day, and still another on the tenth. I knew two exceedingly young children, not under my care, that were operated by the undertaker, he finding pus in the pleural cavity.

I make the point that empyema is frequent, that it generally occurs in children where there is any pleuritis at all, and should be drained early and by incision. These cases bear out the

statement that the course of the flu is short and that when it lasts many days some complication exists. Empyema must have started early to have been well developed in ten days.

DR. G. W. McCASKEY, Fort Wayne: It seems to me that the evidence up to this time tends to confirm the opinion that the primary cause of the epidemic, or pandemic, is the Pfeiffer bacillus which, by lowering the resistance of the individual, paves the way for the onset of other invading organisms. You are all familiar with the classic experiment of Pasteur many years ago. He determined the maximal dose of the Charbon bacillus. He found that hens could stand a certain dosage; then he had them stand in cold water for a time, twenty-four hours, I believe, and the same dose would be fatal. The lesson is perfectly plain. It is a classic illustration of what we all see clinically right along—the lowering of the resistance from any cause whatever, and it seems to me that the Pfeiffer bacillus very probably acts like the cold water on the hens' feet, and by lowering the resistance of the individual paves the way for pneumococcus and streptococcus infections.

Of course we must go farther than this if we are to get anything like a satisfactory explanation of what has been going on. I think the way has been pointed out to some extent in the observations of the bacteriologist and pathologist. It has been found that the Pfeiffer bacillus is much more predominant in the early stage of the disease than in the later. It paves the way by lowering the resistance and this is displaced by other invading organisms. We must still go farther and we must take into consideration the change, the seasonal, or periodic change in the virulence of the organism. The Pfeiffer bacillus varies—at times it is not virulent, and the same thing is true of the pneumococcus and streptococcus. Now, perhaps the same seasonal or periodic conditions which affect the virulence of the Pfeiffer bacillus have a similar effect on the pneumococcus and streptococcus. This is entirely theoretical, it is true, but at the same time the Pfeiffer bacillus is more predominant in the early stage and later disappears with the appearance of these other invading organisms.

But this is the point I want to make. It has already been referred to by Dr. Wynn, that if we could in some way have the population of this country breathe fresh air twenty-four hours a day, together with correct living in other respects, proper food, proper sanitation, I believe we could overcome this disease and not have the things that have been predicted for us the next year or two. Fresh air is the one thing par excellence. The most of us get plenty to eat, and I presume the most of us are pretty well taken care of hygienically, but fresh air is the one thing lacking. One man said we must not have too much of it, but I do not think we can. Fresh air should enter the lungs, but there

should be no chilling of the surface of the body. These, I believe, are the most important things, and if we could teach them to all the people I believe we could head off another epidemic.

DR. GEORGE W. SPOHN, Elkhart: Judging from the discussion, the profession is no farther along than it was a year ago. It seems to me the profession is very pessimistic about this question. If we are going to allow ourselves to become nervous and disturbed, as physicians, we cannot expect our patients to remain calm.

I am working with the mucous membranes only, and of course do not see very many of these cases in the acute form, but I see them in the chronic form and I have found that in otorrhea and other ear disorders by using vaccines instead of doing so many mastoids I can stop from three-fourths to five-sixths of the mastoid operations. Where we get a streptococcus infection if we use a streptococcus or mixed vaccine and protect our patient we will get very satisfactory results. Where they have been using the vaccines right along as a protective measure, where they have cleaned up the teeth, the tonsils and nasal sinuses, where they have good hygienic instruction, hardly one had the flu last year. This same thing can be carried out in many places, and what is the use of being so pessimistic about it and looking on the dark side? The trouble is that in nearly all these worst cases the physician does not see them until very late. He sees them when the infection is in extremis and nothing can be done for them.

I do not know that anything is better than vaccine as a protective measure. You cannot hurt the patient by the proper use of vaccine, beginning with a small dose. I am satisfied I have never injured anyone. Study the vaccines, study the method of giving them, and use a vaccine from a reliable house. A large majority of the cases of ear and throat trouble will subside by the use of vaccine.

DR. CHARLES E. REED, Culver: I like the attitude of the last two speakers on this question of treatment. We need to lose our pessimism. The public is in a rather pessimistic frame of mind, owing to articles which have been appearing in the lay press speaking of the fact that we have previously had secondary epidemics and that we will likely have one this fall, some papers going so far as to say that it will be worse than before. I believe, however, the public nowadays is inclined to meet us half way. We are the custodians of the health of the community. The people begin to look to us for the modification or prevention of various illnesses, and especially will this be true after the men return who have been in the service and have realized what has been done by thoroughgoing sanitation in the camps. We have a sprinkling of men all over the country who will take up the

propaganda and force it on the attention of the community.

I believe our greatest effort should be not treatment but prevention. I think from the experience which I have had in my own work we may draw some lessons. At the Culver Military Academy, we had about 500 students last year, with about 200 employees, largely grouped together as in an isolated military camp. Up to the Thanksgiving festivities we had absolutely no influenza or anything suggesting it. The measures which we introduced were, that no visitors were allowed in any of the buildings, no parents were allowed to visit their children in the buildings until they had been under observation for three or four days. After three days, if they were free of any evidence of disease, they were allowed to go into the buildings but not to general assemblies. Immediately following our Thanksgiving dance with visitors from the outside, we had forty cases in one day. We at once closed down the school, divided the men into groups, and those who were free of evidence of disease were allowed to go home, provided they could get home in eight hours. The others were kept under observation for three days and sent home if they were free from any evidence of influenza. We had 115 cases of influenza, but we did not have one case of pneumonia and we did not lose a single patient. That was not due to any specific medication, but to the fact that every man who had any temperature was put to bed and kept there. We kept the men in bed, even though the disease was light, for three or four days after every active symptom had subsided, and convalescence was said to be very slow. We had no serious complications or deaths.

It seems to me that public assemblies should be discouraged, especially in the first few weeks. Our people should be told, individually and by means of public dissemination of information, to avoid too many public assemblies. They should be encouraged to keep themselves in the best of health, and to avoid undue exposure. One thing we find in these early fall days is that the students in their games have a tendency to lie on the ground when they are tired. Many of you who have children under your care in schools and in your community should remember this. If you can impress on them the necessity of avoiding chilling the surface of the body you will go a long way in the prevention of influenza.

The eliminating of diseased tonsils is an important feature because of the lowered vitality resulting from disease of these glands.

As to the use of vaccines, we used the Rose-nov vaccine, and I believe it was a large factor in preventing pneumonia and other complications and possibly modified the influenza process, though it did not prevent the disease itself.

DR. A. C. KIMBERLIN, Indianapolis: When influenza came on us last year it was like a new form of therapy, a new theory concerning disease. We did not understand it. We still do not understand it. Certainly we today, as a body of physicians, have no special confidence in any one method of treatment. Most cases I saw late, and they were complicated. But it occurred to me there was a psychic element on account of war, very prominent in many cases, which exerted an unwholesome influence on the person who had been exposed to the influenza bacillus, whatever it may be. Many people through habit, and some through ignorance, did not properly take care of themselves after they had been exposed; consequently complications occurred, especially pneumonia, when, as we all know, it was too late.

In the physical examination of the pulmonary condition there are two things that should be emphasized. In nearly all these cases on physical examination of the lung you found two things: First, there would be rather frequently, if carefully listened for, a degree of moisture plainly recognizable and rather scattered throughout some part of the pulmonary tissue. The next thing of importance in the physical findings in those cases which was especially impressed on my mind was the fact that there was a very marked diminution of the vesicular volume. Percussion in most of these cases was of no value whatever, but the diminished vesicular volume which was not necessarily associated with a prolonged respiratory sound, was important. When you get a diminished vesicular volume you have a perfect right to expect prolonged expiration. That did not occur in many of these cases of so-called influenzal pneumonias; but the diminished volume which was often not localized was so frequently present in chests in which you would not find on examination nearly the usual physical signs of infiltration.

Prevention is most important. I do not know anything better in the way of prevention than isolation; but we cannot all have that. The area which should receive serious attention is the upper respiratory tract. While the tonsils should receive attention, I do not believe this disease makes its entrance through the tonsillar tissue. It is more apt to be the upper pharyngeal and postnasal region. A mild antiseptic spray used frequently in the nose certainly does exert an influence in preventing the invasion of this organism, and the best thing I have found as an antiseptic for the mouth and throat is a 50 per cent. solution of alcohol as a gargle. One cannot imagine how many organisms may find lodgment just at the entrance of the nose. Twice a day I took a piece of gauze and swabbed the opening of my nostrils with pure alcohol, then sprayed my nose and throat with a 5 per cent. solution of argyrol.

DR. NETTIE B. POWELL, Marion: When I entered the Grant County Medical Society about twenty-five years ago one of the old doctors whose axiom was "Physic 'em good," said to me: "When you have been in the practice of medicine as long as I have you will have to work a great deal harder to keep up on your words than I am doing." Surely this scientific discussion of the pathologist carries out his prophesy. We surely are looking at disease from a very different standpoint than we did in those years.

Budd, in a recent article on the complications following influenza, asks this question: "Have there really been two or three different epidemics occurring concurrently with the influenza?" The point brought out in the discussion was that the influenza lowers the resistance and the other infections come in and do the work later, so we must be on the watch more and more for the sequelae. We must keep in touch with our cases for a longer and longer period and we must teach our people that they will be longer getting better, that the convalescence will be slow.

Dr. Wynn said the gastro-intestinal symptoms were less in this epidemic than in that of 1890. I do not believe that is true so far as children are concerned. It seems to me we have a great deal more of the gastro-intestinal type than before.

In regard to the amount of empyema, I believe the authorities are claiming that we have less empyema following influenza than following measles and true pneumonia and that we are having more empyema from the condition which Dr. Emerson mentioned, the puncturing through of the pus into the pleural cavity.

DR. CHARLES P. EMERSON, Indianapolis: Time will allow of but brief mention of the points brought out in the discussion. We urge prophylactic treatment now, not delay until the epidemic is serious. We do not know what the flu organism is, but we do know that the sequelae are due to well known organisms and these organisms require portals of entry of infection and foci for their growth, therefore we can do a great deal between now and winter to head off or at least to lessen the virulence of the infection by looking after tonsils, teeth, etc.

You agree that optimism is of great value—greater value, perhaps, than vaccines—a pretty broad statement to make. If we cannot have both let us at least have the optimism. In one college they had about 350 cases of flu. They had a good many cases of pneumonia, but only one death, and that was a boy who was frightened when he saw blood in his sputum and began to cry, "I am going to die! I am going to die!" And he did. So far as his doctors could tell clinically his was at first not a very severe case, but he certainly was more pessimistic than the others and may have in this way

weakened one of the strongest bulwarks for defense, his optimism.

In reply to the question, "What else to do for prevention?" we would recommend that those who had flu pneumonia now have roentgen-ray plates made of the lung. We are sometimes surprised at the extent of the interstitial pneumonia we find there. If a person has throat infection he might get the tonsils out now, etc., and then take life rather easily; rest in bed, fresh air and lots of good food is a very good way of controlling these troubles.

"Are those who were infected last year predisposed?" I do not know. I think this influenza infection will flare up again. It is only fair to say that many patients now under treatment for tuberculosis really are cases of this interstitial pneumonia following influenza, and that in others the influenza has rekindled an old tuberculosis.

DR. E. N. KIME, Indianapolis: I do not feel that I am especially qualified to talk about the treatment of flu. I worked in the postmortem room almost constantly until military exigencies made it necessary to stop my observations at that particular time.

As to the lesions we found, I would like to emphasize the fact that we had early hemorrhagic lesions only at the very start, and very little edema either in the chest or elsewhere. A thin, bloody fluid developed in the chest about the last of the first week and then from that time became increasingly more purulent and more fibrinous, just what you would expect from a mixed pneumonic and other secondary infections. We found no interstitial pneumonias or interstitial changes except the congestion of the interalveolar capillaries (which has been pointed out by LeCount) with interalveolar necrosis and marked congestion of the peribronchial lymph nodes.

The bacteriologic findings were very diverse. The most predominant organism in the first week was the Pfeiffer bacillus and the technic was watched very carefully in order to be sure that we did have the Pfeiffer bacillus. In other words, we had gram-negative very minute hemophilic organisms that did not grow at room temperature. Other commensals, pneumococci and streptococci, appeared during the second week and very soon predominated over the influenza bacilli. We found the influenza bacillus in some 50 per cent. of cases and we found a high percentage of influenza bacilli in the sputum of cases which were clearly not influenza; hence we believe that the influenza bacillus may have been endemic in that region. The pneumococcus which was present in a vast majority of cases was an atypical strain, Type 4, which has been shown by Stillman to be the least virulent of the pneumococci. Type 3, the organism usually most virulent, was present in only 6 per cent. of cases. The most frequent

pneumococcus found in bronchial exudates before the epidemic started was the pneumococcus, Type 4; the most frequent streptococcus was the streptococcus hemolyticus. The meningococcus present in both pre- and postmortem cultures was an intermediate type, neither the normal strain of Flexner nor the parameningococcus of Gordon. So it seemed that we were dealing with a condition which was a combination or symbiosis of several mixed organisms endemic in that vicinity. Whether or not the *B. influenza* was unusually virulent we could not say, but it was present early in a sufficient number of cases and sufficiently predominant in the total findings to consider it at least the main indicator if not the primary cause of the epidemic.

A FEW OBSERVATIONS CONCERNING CHRONIC UTERINE INFECTIONS *

WALTER H. BAKER, M.D.
SOUTH BEND, IND.

This paper is written with the object of adding a bit of evidence in female pelvic surgery. The writer being personally acquainted with and more or less in constant touch with the cases reported he hopes will add to the accuracy of the findings.

These cases arising for the most part from infections in the uterus and appendages, and the operations on them, may be divided into two general classes. Those in which the tubes alone were removed and those that had the combined operation of salpingectomy and hysterectomy.

All of the cases of infection were in the sub-acute or chronic stages, averaging ten to thirteen weeks after the acute stage had passed, the temperature and white blood count being used as a guide. No case was operated with a fever or a white blood count above 9,000 per cm. All other symptoms being equal to these, the white blood count and temperature were considered the most reliable guides. Plenty of rest in a recumbent position was advised after the initial attack before surgery was recommended. In a few acute cases an abscess was accessible via the vagina and cul-de-sac route and drainage was done, but no other surgical procedure was undertaken in acute cases.

It seems to me that the chief postoperative problems which the surgeon has, in operating on the cases of chronic pus tubes or chronic infection of the uterus and adnexa are: (1) Disturbances of the internal secretions of the ovaries producing in the convalescent a vaso-

* Read before the Indianapolis Session of the Indiana State Medical Association, September, 1919.

motor symptom complex which may persist for many years after operation. (2) If salpingectomy is done without at least a subtotal hysterectomy, the patient is apt to be left with a very annoying menorrhagia or a disagreeable vaginal discharge, or both.

and produces scar tissue or other changes which cause a latent alteration in their proper function. (2) In operating these cases there is not enough care taken to preserve the blood supply of the ovary intact and this means the gradual degeneration of its

PATIENTS HAVING BOTH HYSTERECTOMY AND SALPINGECTOMY

Under 45 Years of Age									
Cause	Age	Date of Operation	Living	Recovery	Vasomotor	Trophic	Uterine Hemorrhage Following	Psychosis	
Mrs. A. Hemorrhage.....	32	1/ 9/14	Yes	Good	Yes	None	No	Yes	
Mrs. B. Hemorrhage.....	23	4/18/14	Yes	Good	Yes	Yes	No	Yes	
Mrs. C. Tubercular tubes.....	23	7/15/14	Yes	Slow	No	No	No	No	
Mrs. D. Pus tubes.....	26	7/ 2/14	Yes	Good	Yes	Yes	No	Yes	
Mrs. E. Fibroid pregnancy.....	36	8/12/14	Yes	Good	Yes	No	No	No	
Mrs. F. Tubal pregnancy and degenerated ovary	29	9/20/15	Yes	Fair	No	Yes	No	No	
Mrs. G. Tuberculosis.....	31	9/22/15	Yes	Good	Yes	Yes	No	No	
Mrs. H. Fibroids.....	..	11/16/15	Yes	Good	No	No	No	No	
Mrs. I. Polypus.....	..	3/ 1/15	Yes	Good	Yes	No	No	Yes	
Mrs. J.	40	3/16/15	Yes	Good	Yes	No	No	Yes	
Mrs. K. Pus tubes.....	27	3/27/15	Yes	Good	Yes	No	No	Yes	
Mrs. L. Pus tubes.....	23	4/12/15	Yes	Good	No	No	No	No	
Mrs. M. Hemorrhage.....	35	4/24/15	Yes	Good	Yes	No	No	No	
Mrs. N. Myomata.....	36	5/10/15	Yes	Good	No	No	No	No	
Mrs. O. Epilepsy.....	22	11/24/16	Yes	Good	No	Yes	No	Yes	
Mrs. P. Pus tubes.....	24	3/23/16	Yes	Good	Yes	No	No	Yes	
Mrs. Q. Uterine polypus.....	38	8/30/17	Yes	Yes	No	No	No	No	
Mrs. R. Pus tubes.....	27	4/19/18	Yes	Good after second operation	No	Yes	No	Yes	
Mrs. S. Myomata.....	37	9/12/18	Yes	Good	No	No	No	No	
Mrs. T. Hemorrhage.....	32	2/23/18	Yes	Good	Yes	No	No	No	
Mrs. U. Menorrhagia.....	36	6/ 3/18	Yes	Good	No	No	No	No	
Mrs. V. Pus tubes.....	42	8/12/18	Yes	Good	No	No	No	No	
Mrs. W. Menorrhagia.....	30	8/ 3/18	Yes	Good	No	No	No	No	
Mrs. X. Fibroid.....	41	6.17/18	Yes	Good	No	No	No	No	
Total.....			24	24	11	6	0	9	
Over 45 Years of Age									
Mrs. Y.	53	10/ 9/17	Yes	Good	No	No	No	No	
Mrs. Z. Carcinoma.....	60	2/ 9/18	Yes	Good	No	No	No	No	
Mrs. AA. Cancer.....	60	3/31/14	Yes	Good	No	No	No	No	
Mrs. BB. Carcinoma.....	67	7/24/14	Yes	Good	No	No	No	No	
Mrs. CC. Uterine polypus.....	45	10/ 7/15	Yes	Good	No	No	No	No	
Mrs. DD. Uterine fibroid.....	48	10/15/15	Yes	Good	No	No	No	No	
Mrs. EE. Malignancy.....	62	7/20/16	No	Died					
Mrs. FF.	47	11/21/16	Yes	Good	No	No	No	No	
Total, 32 (1 died).....			31	31	11	9	0	9	

PATIENTS HAVING SALPINGECTOMY ONLY

Age	Cause	Date	Vasomotor	Hemor-rhage	Psychosis	Trophic	Remarks
Mrs. GG. 38	Pus tube.....	9/25/16	Yes	No	Yes	No	Very nervous
Mrs. HH. 30	Tubercular tubes.....	1/17/16	Yes	No	Yes	No	Thyroid enlarged, very nervous
Mrs. II. 28	Pus tubes.....	2/12/19	Yes	No	No	No	
Mrs. JJ. 32	Pus tube, tubal pregnancy..	9/17/19	No	No	No	No	Recovery good
Mrs. KK. 28	Pus tube.....	11/23/18	No	No	No	Yes	Recovery good
Mrs. LL. 42	Pus tube.....	6/ 4/17	Yes	No	No	No	Very nervous
Mrs. MM. 25	Pus tube.....	7/23/17	Yes	No	No	No	Good recovery
Mrs. NN. 25	Pelvic infection.....	?	No	Yes	No	No	Profuse and irregular hemorrhage
Mrs. OO. 29	Pus tube.....	3/16/17	Yes	No	No	No	Very nervous for 6 to 8 months
Mrs. PP. 30	Pus tube.....	2/15/18	No	No	No	No	Good recovery
Mrs. QQ. 32	Pus tube.....	9/ 3/18	Yes	No	No	No	Good recovery
Mrs. RR. 27	Pus tube.....	?	No	Yes	No	No	Was operated later on account of hemorrhage
Total 12.....			7	2	2	1	

Those cases in the first group, having the disturbance of the vasomotor system, must be due to something that alters the internal secretion function of the ovaries, which may be produced, alone or combined in action, by the following operative forces: (1) The infection operative in these cases effects the ovaries

cells from nutritional reasons and in turn a changed and reduced secretion. (3) A *hormone* exists between the ovaries, fallopian tubes or uterus, and one being removed changes the internal secretion of those remaining. The effect of infection on the ovaries is no doubt a great factor but I think this can, to

a great extent, be ruled out of our cases for the reason that the same type of cases who refuse operation do not have the same degree of severity of vasomotor symptoms at a given time as do those who are operated. The proportion is in no way equal; we have no tabulated list of patients who have not been operated to be compared with our operated ones, yet I believe we may take it by common consent that those who are operated suffer more often from immediate vasomotor symptoms than those who are not operated. If this reasoning is true, then it would remove the infection theory of the cause of those symptoms in our posoperative convalescent cases.

The blood supply to the ovaries should have the greatest care and consideration during an operation for pus tubes or hysterectomy. It is in this way and by closely tabulating results following operations for years that we may expect to speak with assurance regarding the blood supply as a potent causative factor.

Surgery of the female pelvis could be undertaken in these cases with much more confidence and would ultimately be much more successful if we knew better all of the physiology and pathology of the internal secretions of the ovary and the relation this secretion bears to other internal secretions. It is fairly well recognized that there is a *hormone* of internal secretions between the thyroid, adrenals, thymus, hypophysis and gonads and there may be many other organs of internal secretion which belong in the sex *hormones*. A few observers, as Curtis, have argued that the tubes and uterus play a part in the internal secretion of the ovary; without them the ovarian secretion does not properly functionate and a vasomotor complex would arise. Graves says, in the Reproduction System, "The ovary is the predominant factor, but is not an independent factor, for its proper function depends on its physiologic association with the uterus and endometrium."

In a sexual pervert with no other pathology than her degeneracy, a laparotomy was done and a resection of the tubes carefully accomplished. This patient suffered hot and cold flashes, dermatography and other mild vasomotor symptoms characteristic of disturbance of the function of the ovaries. This bit of evidence would tend to strengthen the theory of operative traumatism or the destruction of the fallopian tubes, organs of internal secretion and part of a *hormone* in which the ovary was operative.

In the eight cases accounted for in the following report, above the age of 45 years and presumably at or past the climacteric, in whom there were already vasomotor symptoms of greater or lesser degree characteristic of this

particular stage of life, the removal of the uterus and tubes caused no noticeable change in symptoms, although this is in no way more than suggestive since marked symptoms previously existed in each case. There remains to be seen what effect the removal of the ovaries have on people above 45 years. Undoubtedly the internal secretion from the ovary persists for many years after the reproductive function has subsided and we would notice an immediate increase in the vasomotor symptoms.

When the uterus remained after the removal of the pus tubes or tubes sufficiently diseased to require removal, as shown in one sixth of my cases after operation, there persisted a profuse menorrhagia in one case, and in one half of the cases a disagreeable vaginal discharge persisted for as great a period as seven years, or until a subtotal hysterectomy was done.

Where there is severe infection in the pelvis requiring operation and both fallopian tubes must be removed, it is desirable that a subtotal hysterectomy be done. Such operative procedure will prevent menorrhagia and leukorrhea and does not add greatly to the danger of the operation. Choyce says: "Where both appendages are so diseased as to require removal, and the uterus is the seat of chronic inflammatory changes producing menorrhagia and continual discharge, total hysterectomy should be in addition carried out."

In the following list of patients an attempt is made to note the difference between the type of operations and to tabulate each for comparison.

Konstantinidis in 134 cases of hysterectomy with retention of both ovaries found that one-half suffered from vasomotor, one-third from trophic and one-seventh from psychic disturbances. Report is made from my own private cases; all but two have been under my own observation until the present time. Of the twenty-four cases of hysterectomy and salpingectomy, one-half had some form of vasomotor symptoms, three-eighths psychic, one-fourth trophic.

Of those that had double salpingectomy alone, twelve cases, one-half or a little over had vasomotor symptoms, one-sixth had severe hemorrhages afterward, one requiring hysterectomy one year later, one-half had disagreeable vaginal discharges, one-sixth psychic and one-twelfth trophic symptoms.

There were eight cases operated above 45 years of age with no changes observed. These cases do not differ much from Graves and others in proportion. However, they give no reports of double salpingectomies alone. Of the 32 cases where a hysterectomy and salpingectomy

were done all were subtotal hysterectomies, except when operated for malignancy. Of the twelve cases where the tubes alone were removed the nervous symptoms were not much different from those with the additional removal of the uterus, nor did the mortality differ, but when the uterus was left we had two cases of severe menorrhagia and six cases of offensive vaginal discharge to contend with. Neither were present when a subtotal hysterectomy was done.

CONCLUSIONS

1. The removal of the tubes and uterus, one or both, in extensive infection causes disturbance of the glands of internal secretion. The proportion of symptoms produced between double salpingectomy and salpingectomy with subtotal hysterectomy in infected tubes remains about the same in each with the difference of less postoperative symptoms of menstruation and leukorrhea in favor of the combined operation.

2. The disturbance of the glands of internal secretion in pelvic operations in the female must be due to the fact of interference with the circulation to the ovaries, or that the tubes and uterus are part of a *hormone* of the sexual glands of internal secretion.

3. A subtotal hysterectomy should be done where infection of the pelvic organs is so great as to necessitate the removal of the tubes.

4. Menorrhagia and disagreeable vaginal discharge follows in a number of cases operated for infection of the uterus or adnexa if the uterus is not removed at the time of operation.

5. Close attention should be paid to the problem of postoperative vasomotor symptom complex in these cases and its relation to surgery and infection.

REFERENCES

1. Graves, W. P.: Transplantation and Retention of Ovarian Tissue after Hysterectomy, Surgery, Gynecology and Obstetrics, 25, p. 315.
2. Konstantinidis: Same article as above (1).
3. Watkins: American Medical Journal, 1881, June, 1919.
4. Choyce, C. C.: A System of Surgery.

NEUROCIRCULATORY ASTHENIA *

MILES F. PORTER, JR.
FORT WAYNE, IND.

Prior to the war a physician would have had considerable temerity to make a diagnosis of "irritable heart" as a clinical entity and it is highly probable that but a handful of men the country over could have given an adequate description of the condition. During the war on the other hand it furnished one of the chief subjects of medical conversation though not

under that name. First described by Harts-horne, and classically by DaCosta as a result of his observations during the Civil War, it has since been known as "soldier's heart." Lewis speaks of it as the "effort syndrome," the British army as D. A. H. or "disordered action of the heart," and one of Lewis' pupils coined the term "neurocirculatory asthenia." I have chosen the last because it is to my mind more descriptive than any of the others. "Soldier's heart" is a particularly inapt term since the condition is in no sense limited to men in military service. To be sure its recognition in civil life is very infrequent as compared with its occurrence in military service and this furnishes one of its chief claims on our interest. Complete figures are not yet available but it will suffice to say that every base hospital medical service saw these cases by the score.

The symptoms common to all are breathlessness, precordial pain, palpitation and exhaustion. These are commonly associated with one or more of the following symptoms referable to the nervous and circulatory systems—nervousness, tremor, anxious facies, increased reflexes; and dizziness, fainting and variations in the blood pressure and pulse. Ordinarily breathlessness on exertion first brings the condition under observation. Inquiry elicits the information that the victim is easily fatigued and that he is unduly conscious of his heart because of precordial pain, palpitation or tachycardia. Inspection shows a nervous individual with anxious expression, often emotionally unstable, with a hypersensitive vasomotor system manifested by spontaneous flushing of the face, and ready perspiration. Examination shows a tremor of the fingers usually less fine than that of hyperthyroidism, increased reflexes, and often precordial hyperalgesia of marked degree. The pulse at rest may be slow, normal or rapid, but most often slightly increased in rate, at least during examination. The blood pressure is usually normal but is unduly raised by exercise and is slow in its return to normal level.

The increase of the pulse rate on exertion is at once one of the most striking symptoms and one of the most valuable objective findings. The observations of Meakins and Gunson may be used to illustrate. After a simple test exercise consisting of 75 paces in quick time ending in a climb of 27 steps the average pulse rate in his cases had risen from 86 to 131 while in the controls the rates had been 75 to 110. Two minutes of absolute rest will be sufficient to permit the pulse rate of a normal individual to return to normal after such an exercise. In neurocirculatory asthenia from five to twelve, or even fifteen minutes may be necessary. Absence of physical

* Read before the Fort Wayne Medical Society, Nov. 11, 1919.

signs so far as the heart is concerned, is almost invariable. There is no enlargement though there is no diminution in its size after exercise as measured roentgenologically, a constant finding in normal hearts (Meakins and Gunson). Cardiorespiratory and "accidental" murmurs are frequently heard but all observers agree that the relationship is purely accidental. Lewis found that 58 per cent. of men with neurocirculatory asthenia who were without murmurs were unfit for duty while but 51 per cent. of those with murmurs were found unfit. Forty-two per cent. of all his cases had "systolic murmurs." King in a study of the auscultatory phenomena of 500 supposedly normal hearts found 20 per cent. with accidental systolic murmurs and almost as many more with cardiorespiratory systolic murmurs and systolic murmurs heard only in recumbent position. Electrocardiographic tracings show no variations other than occur in normal individuals.

From a laboratory standpoint the most interesting findings are a reduction in the quantity of urine, an increase in its acidity, and more constantly a leukocytosis. Briscoe found that this was slight or absent during absolute rest but constant when the patient was up and about and increased by exercise. In four of the most severe cases the counts after exercise varied from 18,000 to 23,000 while four of the mildest after exercise gave counts ranging from 8,700 to 13,700. In addition, she noted a relative increase in the lymphocytes. There is increased hydrogen ion concentration in the blood, showing that acidosis accompanies the condition.

The resemblance of this picture to that of hyperthyroidism, so-called, is apparent. It is found, however, no more commonly in individuals with palpable or enlarged thyroids than in others as shown by Addis and Kerr in the examination of 21,000 recruits. To be sure even a palpable thyroid is not a necessary concomitant of hyperthyroidism nevertheless the latter condition obviously will occur much more frequently in individuals with enlarged thyroids than those without, whereas neurocirculatory asthenia does not. Moreover, the typical eye signs such as exophthalmos, failure of convergence, etc., do not occur. Peabody found 60 per cent. of his cases reacted positively to the Goetsch epinephrin test, Wearn and Sturgis 59 per cent. and Boas but 28.6 per cent. Crile says that nearly all of his cases of hyperthyroidism react positively. Wholly unlike the tachycardia of hyperthyroidism that of neurocirculatory asthenia is but little evidenced during rest and markedly exaggerated by exertion. Victims of thyrotoxicosis are anything but asthenic, in fact, astonish one with the energy they dis-

play with such tachycardias and other evidences of embarrassed cardiac action. On the other hand, there are very many striking similarities and such observers as Goodall, Barr, Brooks, Stoney and others believe that if not identical the conditions are at least closely related etiologically.

This brings us to the consideration of the causal factors in the condition under discussion. A large proportion of these patients come under observation early in their military career, though they often give a history of symptoms prior to their entrance into the army. Many have always been "delicate" have been told they have "weak hearts" and that they must therefore "take things easy"; have been unable to take part in the more strenuous athletic games, etc. Naturally as they have grown older and entered on the period of self-support they have gravitated to a job which made but little demand on them. Even so they commonly give histories of considerable loss of time from work.

On their being drafted (rather than enlisted) they are subjected to a material nervous and mental strain, *i. e.*, are frightened, and further are plunged into an existence in which there is a great deal of physical exertion. Almost immediately their symptoms are enhanced, they are "all in" after drill, things "go black" on a long hike, many faint, and large numbers complain of undue fatigue and extreme breathlessness. These men, in other words, are constitutionally unstable; congenitally neurotic, and belong to the vagotonic and sympatheticotonic classes of individuals described by Eppinger and Hess.

Unfortunately for a simple etiological explanation of the condition, while this was largely true of draft troops in the United States as shown by Robey and Boas and Brooks, a large number of the cases observed in the expeditionary forces occurred in men who had negative previous histories and who had enjoyed excellent health in active service for months. Thirty-nine per cent. of Oppenheimer's cases fell in this group. Here infections and mental and nervous strain probably played the causal rôle. Lewis says infection played an important part in from 50 to 60 per cent. of his cases; Parkman in 30 per cent., and Mackenzie attributed the majority of his 400 cases to bacterial and toxic influences. Now practically all of the symptoms of neurocirculatory asthenia are referable to hyperirritability of the sympathetic autonomic nervous system and if infections are an etiological factor in their production it becomes necessary to review the effect of infections on the autonomic system. Probably more than half of the cases are hypersensitive to epinephrin and we know that epinephrin

has a selective action on the sympathetic autonomic nervous system. It is reasonable to conclude then that such cases have a hypersensitive autonomic system. Now, what produces this condition of hypersensitivity? Carroll reports definite evidence of vagal phenomena in trench fever—the commonest infection in expeditionary troops—and cites instances in which the disease was followed by the “effort syndrome” and in which the presence of persistent infection was proven by subsequent successful human inoculation. Pottenger has shown that toxins do stimulate the sympathetic nerves, just as the major emotions do. There is a rapidly increasing mass of evidence tending to show that infections play an important rôle in the production of hyperthyroidism and that this may be brought about through the sympathetic autonomic nervous system. Lane has called attention to the large intestine in this regard and McGarrison has established the fact that not uncommonly the teeth, tonsils and accessory sinuses are the determining factors. Wilson and Durant report definite degenerative histological changes in the cervical sympathetic ganglia in hyperplastic goiter.

As for the effect of mental, nervous and emotional strain let me recall the following facts: Cannon demonstrated adrenin mobilization in considerable amounts under such strain and adrenin acts on the autonomic nervous system. By repeated stimulation of the sympathetic he was able to deplete the adrenal glands of their active principle in a short time. Ramond and Francois collected twenty-six cases of confirmed Addison's disease in their sector within a period of a few months. They concluded that a progressive suprarenal insufficiency might arise from continuous moral and physical tension. In this connection it is interesting to consider that since the thyroid and adrenals are “reciprocally stimulating” glands, to use Pottenger's expression, we should expect to find equally marked thyroid changes under these conditions. McNee and Dunn found the average weight of the thyroid in sixty-five men killed in action to be 26.7 gms., a figure considerably above that for normal adult males.

If, then, our conception is a correct one we have both toxins and severe emotional strain stimulating the autonomic nervous system which in its turn produces an abnormal demand on the endocrine system—the thyroid to produce a condition of hypersecretion and the adrenals to produce increased adrenin production and in the case of the latter at least to cause ultimately a suprarenal insufficiency. Now it is well understood that the tissue chemistry is held in balance by the functions of the endocrine system

which is in turn controlled by the autonomic nervous system. In its continued stimulation then we produce what might be called a vicious circle, as suggested by Ewart, namely:

1. Stimulated autonomic system.
2. Altered body fluids.
3. Altered functions in all systems resulting from altered tissue chemistry.

In this way the acidosis often found in neurocirculatory asthenia may be explained both as to its cause and its effect.

To recapitulate then we have the effect of toxins (usually of infectious origin) and severe emotional strain operating to produce the symptoms of this condition in the previously normal and even more readily in the unstable whom we may call with Carroll the potential individuals. This potential individual may belong to the class included under the term constitutional instability but probably more often has previously been rendered unstable by infections and toxemias operating over a long period of time.

In civil life it is obviously this potential individual with whom we will have to deal and in whom we will be called upon to recognize neurocirculatory asthenia in its milder manifestations. Neuhoof remarks the similarity of the condition as found in general practice to that in the army, with the reservation that vasomotor symptoms are more common in the former.

The treatment may be dismissed in a few words. Rest in bed is absolutely contraindicated. Digitalis cannot be expected to improve the condition since there is no cardiac disease. Graduated exercises, reassurance of the patient who is almost invariably apprehensive because of his supposed heart disease, the adjustment of his mode of living to obviate so far as possible undue mental, nervous or physical strain, constitute the recognized methods of procedure. Occasionally the temporary exhibition of bromids and adrenalin, particularly in cases of recent origin, has a beneficial effect. In many of the prolonged cases, especially of the constitutionally unstable type, the treatment is simply that of a neurosis.

The prognosis is good in the cases of recent and infectious origin, fairly good in those following mental and nervous shocks providing the previous history shows no “neurotic tendencies” and decidedly poor in the constitutionally unstable type. The last will inevitably gravitate to the necessary level of inefficiency and spend a goodly portion of his days and often of his money in consulting regulars, osteopaths, chiropractors, Christian Scientists and other faith healers in a futile attempt to cure his heart disease.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

MAY 15, 1920

EDITORIALS

COMPULSORY HEALTH INSURANCE

Anent the subject of "Compulsory Health Insurance" we note a report adopted by the Chamber of Commerce of the State of New York which opposes the health insurance bill presented before the New York state legislature. The report of the committee sums up the objections to compulsory health insurance in such a clear and concise manner that we feel disposed to reproduce the same in full, which is as follows:

To the Chamber of Commerce:

WHEREAS, On Feb. 6, 1919, your Committee on Insurance reviewed the earlier action of the Chamber with regard to certain bills in Albany, providing, in varying forms, for compulsory health insurance, and then restated its belief that a commission should be created to study the whole matter before any legislation of this character was undertaken by this state; and

WHEREAS, The committee's recommendations at that time were approved by the Chamber, but so far as your committee is informed no commission has ever been created and no comprehensive study of the subject has been made on behalf of the state; and

WHEREAS, Senator Davenport has introduced in the Upper House of the Legislature, Introductory No. 986, a Bill "To conserve the human resources of the State by establishing for employees a system of mutual health insurance funds, constituting Chapter 171 of the Consolidated Laws"; and

WHEREAS, Said Bill if enacted will make health insurance after the first of April, 1921, compulsory upon every employee in the State, with minor exceptions, without physical examination; and

WHEREAS, Further study of the whole subject has convinced your committee that compulsory health insurance attacks the problem from the wrong point of view, and that it is economically unsound and thoroughly unwise. In support of which conclusion your committee submits the following general observations:

1. It is opposed to sound public policy in a democracy, in fostering objectionable class distinctions and a dangerous tendency towards a stratification of industrial society.

2. It is opposed to public policy in encouraging public extravagance, largely through the employment of unnecessary officials and other functionaries.

3. It is opposed to public policy by giving encouragement to socialistic tendencies, and the further and dangerous enlargement of the sphere of the state.

4. It is opposed to public policy in favoring a further encroachment upon private rights and privileges, including the most personal concerns of the individual,

and the supervision, control and direction of the person in matters of health and welfare.

5. It is a danger to democracy, in that the promises made are impossible of fulfillment, and on this ground will ultimately create an unwholesome industrial unrest.

6. It is a delusion in that the poorest poor, who are most urgently in need of sympathetic medical and financial support and assistance are largely if not wholly outside the sphere of social insurance activities of any and every kind.

7. Such demand for compulsory health insurance as exists has been artificially created by a skilful propaganda.

8. It is opposed by conservative leaders of organized labor in this country and abroad.

9. It is opposed by business interests as visionary and dangerous and unnecessary class legislation.

10. It is at best a palliative, and does not reach the seat of the difficulty.

11. It does not promote the health of the individual, but rather fosters a tendency toward malingering and an undue prolongation of minor ailments for the purpose of wrongful gain.

12. Experience in other countries shows that medical treatment under its rules results in a standardized method of mediocre medical practice—the doctor who gives his whole time to the service reduces his profession to a mere trade; the doctor who gives only part of his time to the practice is bound to give it indifferent attention.

13. Experience abroad has also shown that medical practice under this system tends strongly toward a system of public medicine, opinion being divided as to whether under such a system private practice should be allowed at all, or whether the system should be universal; in other words, whether the doctor should become a state employee, leaving private practice and the work of the specialists to the few who are unwilling to submit themselves to state control.

14. All the estimates in England have been more or less at variance with actual experience. The state contribution has been very much greater than had been assumed would be necessary at the outset.

15. English experience shows the original assumptions as to benefits were erroneous, and a continuous agitation exists in favor of an increase in benefits. This applies to the work of those who have the work of administration, and particularly to the fees of the doctors as well as to the benefits guaranteed.

16. We are informed that in Great Britain it is absolutely impossible to fulfill the promises held out by Mr. Lloyd George in 1911. Some facts from the British experience are informing:

Per Annum

- | | |
|--|-------------|
| (a) Beginning with the noncontributory old-age pensions as a gift to the poor, the British nation assumed a responsibility of possibly..... | £30,000,000 |
| (b) This during the war was followed by out-of-work donations costing not far from | 50,000,000 |
| and a bread subsidy estimated at.... | 60,000,000 |
| and in addition, allowances on account of coal prices equivalent to a subsidy of | 30,000,000 |
| (c) On a basis of the best data obtainable, the British government's grants and gratuities and subsidies of all kinds under national health insurance cannot be less than..... | 30,000,000 |
| (d) Or a total of probably not far from.. | 200,000,000 |
| in grants, gratuities and subsidies. | |

These do not include the Poor Law expenditures, war pensions, etc.

17. Experience in Germany has been similar to that in Great Britain.

18. Compulsory health insurance is an elaborate bureaucratic scheme which controls wage-earners' lives and wage-earners' incomes. The hope held out that the institution to be created will be thoroughly democratic and, apart from the overhead charges, self-sustaining, never has been and probably never will be realized. Control of essentials soon passes into the hands of the state authorities, with a corresponding increase in the power of bureaucracy.

19. Generally speaking we have made greater progress in sanitation, in the reduction of the death rate, in the development of voluntary health promoting agencies and all that goes with it, than any other country in the world; and

WHEREAS, In addition to these general observations, your committee offers the following observations with regard to this particular bill which we believe to be un-American, economically unsound, socially wrong and financially unwise:

1. The cost of insurance proper is to be divided substantially equally between the employers and the employees. Someone has estimated the probable annual charge at \$250,000,000. It is further estimated that the fixed overhead charges—one-half of which must be paid by the employees, will amount to \$20,000,000 a year; and although it is difficult to arrive at any estimate of what the state must pay, over and above the payments from the various funds created, the forecast of from \$8,000,000 to \$9,000,000 per annum is the best your committee has been able to arrive at. This as the plan developed probably would ultimately prove to be underestimated.

2. The head of the Health Insurance Bureau which is to be created by the Industrial Commission is given what amounts to autocratic powers over the services of physicians to be employed.

3. There seems to be no limit to the expenses which may be incurred.

4. Amongst the amounts that may be charged to "Management Expenses" of funds is an apparently unlimited authorization for expenses in investigating disease prevention, and instruction in hygiene—excellent undertakings if properly pursued and under proper limitation.

5. Under the general head of "managing and conducting" the business there is apparently no limit whatever fixed as to the expenses which may be incurred; but the various funds must be planned so as to cover whatever may be incurred.

6. The insurance of every employee, with the exceptions named, without regard to physical examination or condition, would probably result after a time in a practice under which a person in indifferent health could not get a job anywhere.

7. Provision is made to insure people who are not residents of the state, the inherent difficulties of which proceeding do not seem to have occurred to the authors of the bill.

8. Appropriations of the New York Legislature for all purposes have increased from \$43,000,000 in 1910 to \$117,000,000 this year. Assuming that the state would not have to pay anything beyond the estimated \$8,000,000 or \$9,000,000 overhead charges, there is nothing in the German or English experience to show any reduction in their Poor Law expenditures, and there is no reason to assume that such a measure here would produce a different experience.

9. A proper increase in the activities of the Department of Public Health, better instruction in sanitation and hygiene in the public schools, almost any program that does not invade private rights and impair self-respect, would be welcomed by this and every public-spirited body.

Resolved, That the Chamber Commerce of the state of New York is opposed to the passage of what is known as the Davenport Bill, Introductory No. 986, and urges upon the members of the legislature the duty of opposing its enactment into law.

Respectfully submitted,

DARWIN P. KINGSLEY, Chairman,
WILLIAM J. TULLY,
JOHN J. PULLEYN,
ISAAC B. JOHNSON,
WILSON S. KINNENAR,
ALBERT B. ASHFORTH,
Of the Committee on Insurance.

Attest:

CHARLES T. GWYNNE, Secretary.
ALFRED E. MARLING, President.
New York, April 2, 1920.

UNNECESSARY FAILURES IN PATHOGENESIS

ONE of the reasons why the public takes so kindly to chiropractors, Christian Scientists, and other medical pretenders is because a certain percentage of medical men are not as frank or consistent in their relations with patients as they should be and do not study their cases sufficiently to recognize the relationship between cause and effect. In consequence the medical pretender gets about as much credit as the regular doctor and neither accomplish what should be accomplished for the patient. There are some general physicians, and a few specialists as well, who instead of telling their patients very frankly that some conditions are best treated by others, will continue to hang on to the cases, presumably for the fees received but possibly because they fear to admit that there are some things that they do not know, though to the detriment of both patient and physician.

We have in mind a woman in comfortable circumstances who has shown every evidence of toxic absorption from some source and who has been paying the penalty by cardio-renal disturbances. She has been under the care of several physicians who have treated her by elimination, rest, and blood pressure reducing remedies, but not one of them made a careful search for the cause of the trouble, notwithstanding the fact that the patient has told every one of the doctors whom she consulted that she suffers from a pus discharge from the right side of the nose when she lies on her left side. Her family physician told her that she was suffering from a "nasal catarrh" which was not curable; and a reasonably good internist told her that the discharge meant nothing as long as she had never had any pain or tenderness about the accessory sinuses of the nose. She next consulted and was treated by a chiropractor, who, of course, told her that such "adjustments"

as he could make would relieve her; but he failed to produce the desired results. Finally, she consulted a nose and throat specialist for her so-called "nasal catarrh." Transillumination not only showed a dull maxillary antrum on one side, with pus exuding from it, but on operation the antrum was found filled with pus and débris. Of course the trouble is chronic and toxic absorption has been going on for years, though the woman's life should be prolonged as a result of getting rid of what probably is the cause of her trouble.

Another class of cases which so many physicians are overlooking is those in which infective foci are located in the teeth or tonsils. Even those doctors who recognize the fact that teeth and tonsils are oftentimes a source of toxic absorption will stoutly affirm that teeth that look all right on the surface, or tonsils that are not large enough to be "knocked out with a club," or fairly dripping with pus on the outside of them, cannot possibly be the cause of trouble. They forget that tooth root abscesses may exist with a fairly healthy looking tooth above the root, as they also forget—or perhaps never knew—that some of the most dangerous tonsils are the small, fibrous tonsils containing a small amount of infective material which is constantly throwing its toxic poison into the blood stream. The point is, we have no right to make dogmatic statements concerning conditions which may exist and which have not been thoroughly investigated, and we are through with no case until we have investigated all possible sources of trouble and eliminated what may be etiologic factors, beginning always with those that are most prominent. Furthermore, some doctors must learn that not only as a matter of common honesty, but in the best interest of themselves as well as their patients they must acknowledge that there are some things that they do not know and that there are some fields of medicine and surgery in which others are better posted than themselves. No physician is at all times sufficient unto himself but must of necessity call to his aid others who are better qualified than himself along certain lines, and sometimes it requires team work of several in order to arrive at definite and accurate conclusions.

POSTGRADUATE STUDY IN INDIANA UNIVERSITY SCHOOL OF MEDICINE

Since the Indiana University School of Medicine is now housed in its fine new building in Indianapolis, with first-class laboratory equip-

ment and facilities, it is preparing to meet the demand of physicians for postgraduate courses in various subjects. A course in Disease-Production and Immunity will be given in the Department of Pathology by Dr. Virgil H. Moon, head of the department, beginning about June 1, 1920—the definite dates to be announced later. The course offered will cover a period of six weeks of lectures and laboratory work, and will be strictly postgraduate in character.

Indiana physicians and those of surrounding territory will do well to avail themselves of this opportunity of getting postgraduate work so close home, and those interested may procure full information concerning the course by writing Robert E. Neff, Registrar, Indiana University School of Medicine, Indianapolis.

DIAGNOSTIC DISCRIMINATION

It is obvious that during such epidemics as those of the past two winters all cases of coryza, rhinitis, tonsillitis, otitis, sinusitis, laryngitis, bronchitis and pneumonia cannot have a common etiological origin. Careful clinical investigation and bacteriological study, in fact, prove conclusively that they do not. Accordingly "influenza" as a diagnosis, predicating as it does a specific infection with Pfeiffer's bacillus, is misleading and harmful both from the physician's and patient's point of view. A topographical pathological diagnosis can be made—and so far as it goes is accurate—and can be supplemented when it is indicated by sufficient bacteriological study to determine the causal organism.

To include under the same categorical head streptococcic otitis, pneumococcic sinusitis, diphtheritic laryngitis, all pneumonias, etc., merely because they happen to be accompanied by symptoms commonly associated with so-called "flu" bespeaks a lack of diagnostic discrimination that is as unnecessary as it is pitiful.

GROUP MEDICINE

The present day enthusiasm for group medicine is not difficult of explanation. Specialization, inevitable though it is, does mean decentralization of control over patients—does result in a lack of correlation of findings in many instances—and worse still, frequently results in procedures instituted without adequate examination and observation. With but minor exceptions no surgical procedure should ever be undertaken without a previous thorough physi-

cal examination of the patient—which means at the hands either of the general practitioner or of the internist. “Surgical calamities” decrease proportionately as the number of such examinations increase. This statement questions the surgeon’s ability to pass judgment on the heart, lungs, the vascular, nervous and endocrine symptoms, but the surgeon can no more cover the internist’s field adequately than the internist can qualify as a competent surgeon. And what has been said of the surgeon applies to the specialist generally. This is the difficulty “group medicine” tries to solve—and does solve when properly applied. It correlates the findings of the various “specialists,” stereoscopes their different views and centralizes the responsibility for the patient’s physical welfare. If the necessary effort is made the same thing can be accomplished without resorting to the formation of groups, of course, and the pity is that it so seldom is done.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THE next annual session of the A. M. A. will be held in Boston some time in June, 1921. There is every reason to believe that a very successful session will result, and Harvard University, with its wealth of clinical material, will offer an added attraction for those who wish to combine clinics with the regular meetings of the various sections.

NEW ORLEANS, with its balmy weather, was a delightful place for a spring session of the A. M. A., but, as was expected, it was not prepared to furnish adequate hotel accommodations for the crowd, and many of those who attended were forced to accept accommodations in boarding houses and private residences. Let us hope that Boston will be better prepared for such a crowd.

THE American Medical Association, at the New Orleans session, unanimously passed the following:

Resolved, That the American Medical Association declares its opposition to the institution of any plan embodying the system of compulsory contributory insurance against illness, or any other plan of compulsory insurance which provides for medical service to be rendered contributors or their dependents, provided, controlled or regulated by any state or the federal government.

ANNOUNCEMENT of the establishment of the National Radium Bank, which has \$375,000 worth of Radium to lend to hospitals and physicians for therapeutic use all over the country, free of charge, was made at the annual meeting of the Medical Society of the State of New York at the Waldorf-Astoria. The announcement was made at the same time by Dr. Eugene L. Fiske that human life might be prolonged 1900 years. To think of fighting the H. C. L. for 1900 years, would not that be terrible?—*The First News*.

THE American Medical Association, through its House of Delegates, unanimously expressed disapproval of compulsory health insurance in any form. However, this does not indicate that the subject is worthy of no further attention on the part of the rank and file of the medical profession, for it is almost a certainty that some sort of compulsory health insurance will be advocated in bills to be introduced in the coming sessions of the various state legislatures. All efforts to pass such legislation should meet with the undivided opposition of the medical profession.

FOR \$5 a man in St. Louis promises to prepare all documents necessary for any physician to secure government permits to both use and prescribe alcoholic beverages. This should be of no particular interest to Indiana physicians, for under no consideration can they obtain such permits, but even if they could it would not be necessary to employ any person to make application for them. The gentleman who is soliciting the patronage of the members of the medical profession is looking for \$5 fees from as many suckers as he can find, and knows that doctors bite at most anything.

WE are extremely fortunate in being able to give to our readers a series of articles from the pen of Dr. Frank B. Wynn of Indianapolis. The subject of this series of articles is “The

Physician," and they are to deal with the social, economic, civic and professional relations of the medical man. The articles are to appear monthly, the first one to be found in this issue, and we anticipate their hearty reception by the readers of THE JOURNAL not only because of their value and interest, but because they come from a man so well known, loved and esteemed by the profession of the state.

THE high cost and scarcity of paper, the increasing scale of wages for printers, stereotypers and pressmen, and finally the embargo on freight and express, is quite enough to give an editor troubled dreams at night and high blood pressure during the day. Where it all will end remains to be seen. If THE JOURNAL is late or appears to be not up to the usual standard, we beg of our readers to have a little patience until conditions are a little more normal again. In reality we think we deserve credit for doing as well as we have during the past year, and we hope that the present record will not be any worse.

WE note in an eastern medical journal that some 200 doctors in New York and Brooklyn have formed a union and have applied to the American Federation of Labor for a charter. The next step we presume will be the fixing of union hours, a scale of wages and overtime charges, defining of apprentices and helpers and the staging of a strike or two. Just about then some utopian idealist will apply for a restraining injunction and blooley—up goes the doctor's union. And yet they say New York and Brooklyn is to be the medical center of the world—well, probably the union is needed for a welcoming body for Russian and German visitors. —*Journal of the Michigan State Medical Society*, April, 1920.

IT is a little strange that Dr. Alexander Lambert, the president of the A. M. A., should be mixed up in a few things that do not meet with the approval of right-thinking medical men. It is all right for Dr. Lambert to champion compulsory health insurance and fight his local medical society on that question if he so chooses, but it does not look particularly well for him, reported as being interested in the Towns-Lambert Drug Cure and Sanitarium of Central Park West, New York City, to be championing the antidrug bill presented for passage before the New York state legislature and aimed at doctors and in the interest of drug addict institutions. The bill, if passed, would prohibit

physicians from prescribing morphin for their patients, and dispensing drugs, and to commit drug addicts to institutions.

THOSE doctors who have not raised their fees for professional services ought to realize that the purchasing power of the dollar has been reduced to about one-half, and it is an impossibility during these days of high prices to live on an income that a few years ago would have been amply sufficient for the doctor not only to live in comfort but in partial luxury. The average doctor's fees are low enough at best, and while "flu" epidemics and their after effect may have added to incomes temporarily, thus bridging over the deficiency that would occur under present high prices, yet the day of reckoning is bound to come to the doctor who does not make his fees correspond to the tendencies of the times. This fact is worthy of the consideration of those doctors who have been satisfied with their increased volume of work because it gave increased incomes to meet increased demands.

THE electors of the American Hall of Fame, founded by the New York University, are now preparing a new list of nominations of men and women for the fifth quinquennial election to the Hall of Fame. Up to date forty-nine men and six women have been elected to the Hall of Fame, including authors, educators, preachers and theologians, philanthropists and reformers, scientists, inventors, missionaries and explorers, soldiers and sailors, lawyers and judges, rulers and statesmen, artists, but no physician or surgeon has been classed among the immortals. In view of all the blessings which the profession of medicine has brought to the human race it is inexplicable that none of the American workers in this field have achieved a place of distinction in the annals of American life. Would it not be perfectly proper for the medical societies of this country to select and vote on the names of their chosen medical heroes? Among the distinguished men sitting on the board of electors this year is Dr. Charles H. Mayo, and this would insure proper consideration of the names of American physicians nominated for the Hall of Fame.

OUR State Board of Health could do a valuable service to the public by compelling the railroad and traction companies to clean their cars. In the case of the traction cars it is a positive disgrace to the company and a decided menace to the public to furnish such filthy cars for passenger service as can be noted on almost any

traction line operating in Indiana. Some of the cars give every appearance of not having had a broom or mop used in them for months. The floors are reeking with filth from expectoration, crumbs from lunches, fruit skins, and debris of every sort. We realize that the traction companies are hard hit by legal restrictions of every kind, and that everyone seems inclined to "take a crack" at the traction companies without realizing that traction companies, like everyone else, must have a profit in order to do business, and at present the scarcity and high prices of labor and materials and legal restrictions as to prices to be charged for freight and transportation are serious handicaps. Notwithstanding this, public health should not be jeopardized because the traction companies are forced to retrench, and we submit to the Indiana State Board of Health the suggestion that it can do a real service by getting busy on the matter to which its attention is here called.

THE demand for nurses is being met by some of our hospitals by the establishment of two-year training courses for nurses, and it is announced that courses of study have been arranged that will maintain the high standing of the profession. A further solution of the nursing situation is being discussed in several cities, and that is the training of practical nurses through the establishment of a two months' course. As the condition at present exists, only the wealthy can afford to employ trained nurses, and some arrangement must be made whereby the hundreds of families who need the assistance of a nurse—not necessarily a trained nurse, but a practical nurse who could give part or all of her time to a case—can secure such services at a cost within their reach. The city of St. Louis is contemplating the establishment of such a course on the advice of Dr. Cleveland H. Shutt, hospital commissioner. The course is to include two months intensive training, at the satisfactory completion of which a diploma will be granted setting forth the possessor's qualifications as a practical nurse. Such a plan will do away with the untrained practical nurse of the past, and will be of inestimable aid to not only the poor but the families in moderate circumstances, especially in epidemics such as have been experienced the past two winters.

INDIANA physicians who reside near the Ohio line and who may be called on to treat industrial cases residing in Ohio should bear in mind that they are very apt to receive a severe shock in

attempting to collect money from the Ohio industrial board for services rendered. It seems that in Ohio the state has assumed the responsibility of paying for medical and surgical services rendered, on a scale of fees that even a few years ago was ridiculous because inadequate, and even more ridiculous during these times of the high cost of everything. It also seems that a medical member of the board has, in a measure, the right to say what shall and shall not be paid as compensation, and he certainly is the watch-dog of Ohio's treasury so far as his connection with the industrial board is concerned. There may be some physicians of limited experience and training who will be willing to take care of industrial cases at fees that are ridiculous in their lowness, but we doubt if competent men are going to put up with an injustice for which there is really no excuse. There is an old saying that you can lead a horse to water but you cannot make him drink, and these industrial cases from Ohio may be brought to Indiana physicians but Indiana physicians are not compelled to take care of them unless the employers of the employee agrees in advance to pay a decent compensation for care.

NEW YORK is being made the "pivotal state" in the fight on the question of compulsory health insurance. The Medical Society of the County of New York is fighting compulsory health and workmen's compensation insurance, and under date of April 16 is sending out a plea to state medical associations to instruct their delegates to vote at the A. M. A. session for a resolution opposing any scheme for compulsory health insurance. The committee epitomizes the plea as follows: "Under the pretense of trying to provide better medical treatment for the workingmen, an organized and subsidized propaganda has been established which endeavors to revolutionize the practice of medicine in advocating schemes for compulsory health insurance. All the plans so far advanced do not provide medical care for the really poor because the person must be employed in order to be insured—not employed, not insured. These same schemes have utterly failed to remedy the supposed ills they pretend to cure in the countries in which they have been tried, and where the decrease in the mortality rate has not been as great as in our own country without compulsory health insurance. The schemes will destroy the self-reliance and thrift of the individual; debase the medical profession as they have in England and Germany; not only drive the best men out of the

profession, but prevent the best men from entering the study of it in the future; establish offensive class distinctions; endanger the peace and prosperity of the country, and establish a powerful body which will be a constant political menace to our republican form of government."

Two Louisville physicians, and perhaps there are others, are doing a thriving business in dispensing alcoholic drinks through the medium of prescriptions, and federal officers who have discovered between 1,500 and 2,000 prescriptions that have been issued by the two doctors within the last few weeks, are trying to put a stop to the practice. Fortunately, Indiana is not troubled, for the Indiana doctors cannot obtain federal permits to write prescriptions for alcoholic beverages, and even if they could write prescriptions the druggists of Indiana are not permitted to fill such prescriptions. We have contended that national prohibition has never been brought about by anything like a majority vote, or in response to any popular sentiment, and, accordingly, the present "dry" condition is not an expression of the will of the people, as a whole but merely represents the sentiment of a minority. We also admit that we never have been very strong for prohibition of the kind that has been enacted, though we frankly admit that it has been a wise thing for the country, and its strict enforcement is going to harm no one except those who profit by traffic in spirituous liquors. There really is no good and sufficient reason why physicians should be permitted to prescribe alcoholic beverages, and the regulations that pertain to Indiana could well pertain to every other state in the Union. In fact, if prohibition in any form is to continue as a federal measure, then we should have a uniformity of laws and regulations for all the states, so that with Indiana "dry" in every sense of the word, the neighboring state of Kentucky will also be "dry" and not subject to the mercenary tactics of physicians who, if they so choose, can make it possible for thirsty individuals to secure their booze regularly through the medium of prescriptions from doctors.

THE American Journal of Clinical Medicine, in commenting on the action of the Chicago Medical Society in adopting a new fee bill, has the following facetious suggestions to offer:

The committee on fee revision of the Chicago Medical Society is to be congratulated on its laudable effort to keep up with the procession. At the same time, they have failed to develop what might be termed "masterly activity." A mere 60 to 100 per cent. in-

crease is recommended, thus making the ordinary professional call cost the "ultimate consumer" from \$5 to \$10. A strictly up-to-the-minute bill should read something like this (for the real article, see any automobile service station statement, such as, for instance, one lying before us):

MR. EX-PATIENT:

To Drs. Getit and Go.....Dr.

Labor: going to patient, shaking hands with him and showing solicitude; feeling pulse and taking temperature; inserting thermometer and removing same; baring chest and percussing; listening to heart to detect misses; overhauling abdomen; tapping teeth with tool to ascertain whether apices were tender; looking at tongue; shaking head over condition of same; inquiring into condition of bowel; ascertaining vesical activity; examining tonsils and having patient say, "Ah" (Later, he'll say "Oh!" with appropriate additions.—Ed.); asking if appetite is good; considering the case and prescribing; going back to office; making out this statement:

1 hr., 45 mins.....	\$14.50
Wear on tires (going).....	.50
Wear on tires (coming).....	.50
Oil and gas consumed.....	.55
Use of thermometer and stethoscope.....	.50
Pills given to remove deposits in cylinders..	1.00

Grand total\$17.55

Note.—Please remit; interest at 8 per cent. after one week.

Naturally, one is *impressed* (or, *depressed*) by a bill like that. It is convincing—*scquelching!* The patient gets up at once and hies him forth to acquire the \$17.55. That is the main thing.

Think, too, of the possibilities for the artistic or imaginative M.D. What ornate and interminable "bills of particulars" he could render to certain patients! Why, if he is possessed of any constructive ability, he ought to be able, within a year or so, to own at least three shirts and have two eggs for breakfast. His wife also might, ultimately, own a hat like Mrs. Plumber's. By all means, let us have a modern and elastic fee scale—an *auto-motive* one, so to speak.

INDIANA doctors were well represented at the New Orleans session of the American Medical Association. According to the official registration, those who attended the session were as follows:

Allen, H. R., Indianapolis.
Barnhill, John F., Indianapolis.
Bernheimer, H. L., Terre Haute.
Boren, S. W., Poseyville.
Blount, R. D., Valparaiso.
Bulson, Jr., Albert E., Fort Wayne.
Calvin, W. D., Fort Wayne.
Carmack, John W., Indianapolis.
Chappell, Ralph S., Indianapolis.
Christopbel, W. B., Mishawaka.
Clark, Edmund D., Indianapolis.
Clark, Stanley A., South Bend.
Combs, Charles N., Terre Haute.
Cotton, S. M., Goldsmith.
Gregor, Frank W., Indianapolis.
Crowder, Joe R., Sullivan.
Davis, Albert T., Marion.
Dukes, F. M., Dugger.

Eastman, Joseph Rilus, Indianapolis.
 Eberwein, J. H., Indianapolis.
 Eckhart, C. G., Marion.
 Eshleman, L. H., Marion.
 Gillespie, Charles E., Seymour.
 Graham, Alois B., Indianapolis.
 Hitchens, A. Parker, Indianapolis.
 Howard, C. Norman, Warsaw.
 Humes, Charles D., Indianapolis.
 Jackson, Frank G. Muncie.
 Kearby, D. O., Indianapolis.
 Kelly, Walter F., Indianapolis.
 Kennedy, T. C., Indianapolis.
 Kennedy, W. H., Indianapolis.
 King, James E., Richmond.
 Kitson, Frank S., North Manchester.
 Kruse, Edward H., Fort Wayne.
 Leonard, Henry S., Indianapolis.
 Marshall, George D., Kokomo.
 McCaskey, Carl H., Indianapolis.
 McFadden, Walter C., Shelbyville.
 McCown, P. E., Indianapolis.
 Merrett, Frank W., Gary.
 Millen, George D., Logansport.
 Miller, S. T., Elkhart.
 Mitchell, H. F., South Bend.
 Mozingo, Arvine E., Indianapolis.
 New, C. F., Indianapolis.
 O'Brien, T. J., Clayton.
 Rarick, John E., Wolcottville.
 Ravdin, M., Evansville.
 Robinson, Clifford C., Indiana Harbor.
 Ross, David, Indianapolis.
 Sensenich, R. L., South Bend.
 Stephenson, Richard, West Lebanon.
 Tomlin, William S., Indianapolis.
 Van Swearingen, Budd, Fort Wayne.
 Walters, Arthur L., Indianapolis.
 Welborn, James Y., Evansville.
 Whallon, A. J., Richmond.
 White, Hugh J., Hammond.
 Wishard, William N., Indianapolis.
 Wynn, Frank B., Indianapolis.

nue Regulation No. 60, physicians desiring to purchase and prescribe liquors in their practice are required to procure a permit to prescribe. This can be obtained by filling out an application on Form 1404 in triplicate and filing it with the federal prohibition director of the state in which the physician is licensed to practice. This permit, when issued, allows him to prescribe liquor for medicinal purposes only, and when such liquor is necessary to afford relief from some known ailment. It also allows him to purchase not more than 6 quarts of liquor during any calendar year for professional use only. Bonds need not be filed by physicians, dentists or veterinarians, or by hospitals or sanatoriums unless required by the commissioner. It is not necessary for physicians to pay \$5 or any other amount to any lawyer or bonding company. No fee is required for registering and securing a permit under the prohibition law, and the government officers can and will do all that is necessary to assist a physician to procure a permit without any cost to him. THE JOURNAL has endeavored to keep its readers informed regarding the provisions of the prohibition law. It will continue to do so in the future. The requirements for registration under the law are not difficult; however, if any of our readers are in doubt as to what to do in order to comply with the law, we shall be glad to advise them.—*Journal of the American Medical Association.*

APPARENTLY some of the by-products of prohibition are going to be as interesting as the main issue. Without intending to cast any slurs on our great and noble sister profession, it is indeed an ill wind that some lawyer cannot manipulate to his advantage. Judging from the letters received, physicians are being circularized by a member of the legal fraternity who has devised a method of helping them to comply with the prohibition law with the greatest amount of ease and convenience to themselves and with profit to him. The circulars have this interesting legend printed in large red type on the face of the envelop: "What the U. S. Government Allows You to Do. I Know the Law. I Will Do Everything But Sign Your Name." The circular offers to assist physicians in securing government permits to purchase or prescribe liquor. While it does not expressly say so, the impression conveyed to the uninformed physician is that every practicing physician must file a bond in order to purchase or prescribe any amount of liquor. This is not the case. As stated in the abstract of Internal Reve-

WE feel that the following fee bill adopted by the Chicago Medical Society is of sufficient interest to warrant its publication herewith: "This fee table is intended as a guide to members in making charges for their services. It is obvious that no hard and fast rules can be made in this matter, because the range of the amounts of fees for medical and surgical services should have reference to the degree of responsibility assumed, and to the time consumed.

Day visit in city where less than one mile is traveled.....	\$ 3 to	\$ 15
Day visit in city where more than one mile is traveled.....	5 to	25
Visit in city when called after 8 p. m. or before 8 a.m.....	5 to	30
Visit in city requiring sacrifice of office hours	10 to	30
Visit in city in consultation with another physician	10 to	100
Visit to distant patients, in addition to all expense, per hour.....	10 to	25
Administration of antitoxin or other hypodermic medication in addition to usual fee	5 to	50
Consultation or advice over telephone..	1 to	10

Office Consultation—

Ordinary, not involving complete physical examination	2 to	5
Including complete physical examination	10 to	50

Office treatment requiring use of instruments, topical applications to eye, ear, nose, throat, urethra, bladder, vagina, rectum, abscesses, redressing of wounds, use of electricity, readjustment of splints, etc.....	5 to	25
---	------	----

Examination for life insurance.....	5 to	25
-------------------------------------	------	----

Vaccination in office.....	3 to	5
----------------------------	------	---

Spinal puncture (in addition to usual fee)	10 to	100
--	-------	-----

Intravenous medication	10 to	100
------------------------------	-------	-----

Intraspinal medication	100 to	1,000
------------------------------	--------	-------

Written opinion or advice.....	10 to	50
--------------------------------	-------	----

Examination for purposes of legal evidence	25 to	200
--	-------	-----

Necropsy	100 to	500
----------------	--------	-----

Attendance—

At Court as expert witness.....	50 to	500
On normal labor or accidental abortion'	50 to	500

Forceps delivery, version, placenta, praevia or craniotomy.....	100 to	1,000
---	--------	-------

Induction of premature labor.....	100 to	1,000
-----------------------------------	--------	-------

Cesarean section	200 to	5,000
------------------------	--------	-------

Fitting of trusses, braces, splints, supports, etc.....	25 to	200
---	-------	-----

Simple fractures (reduction and first dressing), phalanges, metacarpals, metatarsals, ribs, etc.....	50 to	200
--	-------	-----

Fractures Involving—

Wrist or forearm	75 to	300
Elbow, arm or clavicle.....	100 to	1,000
Ankle, leg or patella.....	100 to	1,000
Thigh or knee joint.....	200 to	1,000
Pelvis, spine or skull.....	300 to	1,000
Bones of face.....	100 to	1,000

Simple Dislocation (reduction and first dressing)—

Finger to toe.....	25 to	100
Clavicle or mandible.....	50 to	200
Larger joints	100 to	500

Amputations—

Finger or toe.....	50 to	200
Hand, forearm, foot or ankle.....	100 to	500
Arm or leg	150 to	600
Shoulder joint or thigh.....	200 to	1,000
Shoulder, clavicle or scapula or hip joint	500 to	5,000
Breast	250 to	5,000
Penis	200 to	2,000

Compound Fractures or Dislocations—
Same fee as for amputation at corresponding location.

Open Operation for Fractures of Dislocations—Double the fee for amputation at corresponding location.

Operations on Bones for Inflammation, Suppuration, Necrosis, etc.—Double the fee as for amputation at corresponding location.

Hernia—

Reduction of strangulated.....	50 to	300
Emergency operation for strangulated hernia.....	300 to	2,500
Operation for simple hernia.....	200 to	1,000

Polypi of nose, ear, cervix uteri, or rectum	100 to	300
--	--------	-----

Rectal or anal operations for fissure, fistula, stricture, abscess, hemorrhoids, etc.....	200 to	1,000
---	--------	-------

Operation on kidney	300 to	5,000
---------------------------	--------	-------

Cystotomy or litholopaxy	250 to	2,000
--------------------------------	--------	-------

Plastic operation on urethra or bladder.....	250 to	2,000
--	--------	-------

Operation on the foreskin.....	50 to	250
--------------------------------	-------	-----

Urethrotomy or dilatation of tight urethral stricture	100 to	500
---	--------	-----

Operation of radical cure of hydrocele or varicocele, or castration.....	100 to	1,000
--	--------	-------

Aspiration of thorax, pericardium, abdomen, bladder or scrotum.....	100 to	500
---	--------	-----

Prostatectomy	300 to	5,000
---------------------	--------	-------

Operation—

On thoracic cavity.....	250 to	2,000
-------------------------	--------	-------

Within abdomen or pelvis not requiring resection or opening viscera...	100 to	5,000
--	--------	-------

Within abdomen or pelvis requiring resection or artificially joining viscera	500 to	10,000
--	--------	--------

On cervix uteri, vagina or perineum. For clubfoot, knock-knee, bow legs, ankylosis, mal-union or bone set, etc.	200 to	2,000
--	--------	-------

On skull for fracture, tumor, abscess, etc.	300 to	3,000
--	--------	-------

On spinal column or spinal cord....	300 to	3,000
-------------------------------------	--------	-------

On thyroid gland.....	300 to	3,000
-----------------------	--------	-------

For transfusion of blood.....	200 to	5,000
-------------------------------	--------	-------

For removal of cataract.....	200 to	1,000
------------------------------	--------	-------

For removal of eyeball.....	100 to	500
-----------------------------	--------	-----

For removal of foreign body within eye	100 to	500
--	--------	-----

On muscles of eye, sclera or iris.....	100 to	500
--	--------	-----

Within middle ear or upon mastoid process	200 to	5,000
---	--------	-------

Excision of tongue or larynx.....	200 to	5,000
-----------------------------------	--------	-------

Intubation of larynx.....	50 to	500
---------------------------	-------	-----

Tracheotomy	100 to	1,000
-------------------	--------	-------

Tonsillectomy, adenectomy, etc.....	50 to	500
-------------------------------------	-------	-----

Operations on nasal septum, antrum or nasal accessory sinuses.....	150 to	1,000
--	--------	-------

Plastic operation for correction of eversions, inversions, adhesions, or defects of eyelids, mouth, lips, palate, external ear, or cicatricial contractions about face, neck, trunk or extremities	200 to	2,000
--	--------	-------

Operation on nerve trunks, veins or large arteries	200 to	2,000
--	--------	-------

Extirpation of simple benign superficial tumors	50 to	200
---	-------	-----

Extirpation of malignant superficial tumors	200 to	2,000
---	--------	-------

Operation on parotid gland, deep cervical, axillary or inguinal lymphatic glands	200 to	1,000
--	--------	-------

200 to	1,000	
--------	-------	--

X-Ray Examinations—

Hand, foot, wrist or ankle (in one plane)	5 to	10
---	------	----

Hand, foot, wrist or ankle (in two planes)	8 to	15
--	------	----

Knee, elbow, shoulder or hip (in one plane)	10 to	25
---	-------	----

Knee, elbow, shoulder or hip (in two planes)	15 to	50
--	-------	----

Head, spine, pelvis or thorax (in one plane)	15 to	100
--	-------	-----

Head, spine, pelvis or thorax (in two planes)	25 to	100
---	-------	-----

Stereoscopic examinations, double fee of single plane examinations.....		
Urinary tract or gall bladder.....	25 to	100
Gastro-intestinal tract	25 to	200
Teeth—entire set	10 to	50
X-Ray or Radium Treatments		
Same as surgical fee for the same condition, lesion or disease.....		

DEATHS

MRS. LUELLA WOOD REASONER, aged 64, widow of Dr. Osmer I. Reasoner, died April 21 at Shideler.

E. C. LOEHR, M.D., of Noblesville, died March 29, aged 70 years. He was graduated from the Medical College of Ohio at Cincinnati in 1871.

J. D. GARR, M.D., died April 15 at his home in Summitville, aged 64 years. He was graduated from the Eclectic Medical College, Cincinnati, in 1896.

JEREMIAH A. PROCTOR, M.D., of Union City died recently, aged 90 years. He was graduated from the Washington University Medical School at St. Louis in 1844.

D. M. KELLEY, M.D., of Brookston, died April 17, aged 65 years. He was graduated from the University of Michigan Medical School at Ann Arbor in 1881.

CHARLES E. BLACKER, M.D., aged 78, died March 23 at his home in Indianapolis, following a short illness. He was graduated from the Ohio Medical College in 1880.

T. W. HELMING, M.D., aged 55, died April 19 at his home in Indianapolis. He was graduated from the Medical College of Indiana at Indianapolis in 1887. He was a member of the Marion County Medical Society and the Indiana State Medical Association.

JESSE C. TRUEBLOOD, M.D., aged 70 years, died at his home in Loogootee March 13. He was graduated from the Miami Medical College, Cincinnati, in 1879. He was a member of the Martin County Medical Society and the Indiana State Medical Association.

GEORGE E. FULTON, M.D., aged 65 years, died at his home in Bluffton April 1. He was graduated from the Miami Medical College in Cincinnati in 1878. While Dr. Fulton was a member of the state house of representatives, he introduced one of the first pure food bills.

ELI L. EBERHARD, M.D., of South Whitley, died March 30, aged 63 years. He was graduated from the Ohio Medical College in Cincinnati in 1880 and was a member of the Whitley County Medical Society, the Indiana State Medical Association, and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE Drs. Campbell of Winamac are establishing a hospital in the Hoffman residence of that city.

DR. ROY LEE SMITH of Indianapolis, and Miss Hazel Elizabeth Miles of Southport, were married April 6.

DR. C. R. APPLGATE from Mohawk has taken charge of the office and practice of the late Dr. W. P. Van Sant.

AFTER a half century of practice, Dr. J. H. McFarland of New Pittsburg has retired, and will devote his time to farming.

DR. JOHN M. T. FINNEY of Baltimore has been elected an honorary fellow of the Royal College of Surgeons of England.

DR. ORAN PROVINCE has resigned as health commissioner of Johnson County after sixteen years of service in that capacity.

DURING the week ending Feb. 14 one case of leprosy was reported at Houston, Texas, and one death from the disease in Norwood, Ohio.

THE Fourth District Medical Society will hold their annual meeting at Madison, Ind., May 25, 1920. A good program has been arranged.

THE malpractice case of Rebecca Brown vs. F. E. Hammond, M.D., was dismissed from Orange Circuit Court April 7, 1920, at costs of plaintiff.

DR. RUPERT BLUE, formerly Surgeon-General, U. S. Public Health Service, left New York, March 27, for Southampton on official business.

THE University of Cracow, Poland, has conferred the honorary degree of doctor of medicine on Mr. Herbert Hoover for services rendered Poland.

THE Blackford County Hospital has recently received a donation of three city blocks of land and \$5,000 for improvements, from Mrs. H. B. Smith, Hartford City.

BLACKFORD COUNTY is to have a county hospital as a result of a special election held March 10 at Hartford City. The estimated cost of the building is \$80,000.

IN the Bedford City Schools a part time physician and a full time nurse have been installed and regulations as recommended by the health authorities are being carried out.

DR. IRA MILTMORE has returned to his duties as chief surgeon of the Gary Steel Company Hospital after having made a three months' trip to Panama and South America.

THE meeting of the Thirteenth District Medical Society was held at Elkhart on Thursday, March 18, in the Elks Temple. There was a good attendance and a fine program.

DR. CHARLES CHITTICK of Frankfort underwent an operation for gall stones March 18 at the Methodist Hospital in Indianapolis. Dr. Chittick is making an uneventful recovery.

DR. RUSSELL HIATT of New Castle has taken charge of the venereal clinic of South Bend, succeeding Dr. E. R. Bush who has gone to Cincinnati to enter the same kind of work.

DR. J. H. BARNFIELD of Logansport has recently completed a postgraduate course in New York City and returned to his home May 1, announcing specializing in gastrointestinal diseases.

A PRESS dispatch from Lima states that Major-Gen. W. C. Gorgas has accepted a five-year contract with the Peruvian government to direct an extensive sanitation program there.

SIR GEORGE MAKINS, president of the Royal College of Surgeons, has become president of the Fellowship of Medicine and Post-Graduate Medical Association, in succession to Sir William Osler.

DR. WALTER H. BROWN, formerly health officer of Bridgeport, Conn., and lecturer at Yale University, has been appointed associate director of the Department of Health Service of the American Red Cross.

AN examination for medical intern in Saint Elizabeth's Hospital, Washington, D. C., at \$1,200 a year and maintenance, will be held on July 1. Other vacancies also will be filled from this examination.

DR. MARSHALL BURR CATLETT of Fort Wayne was married March 30 to Miss Ethel Mae Bercot, also of Fort Wayne. Upon their return from a short trip, Dr. and Mrs. Catlett will reside in Fort Wayne.

EIGHT persons are dead and two are expected to die as a result of a fire which destroyed one cottage and the dancing pavillion at the Ohio Hospital for Epileptics. The dead and injured were patients at the institution.

DR. RICHARD C. CABBOT, Boston, has been appointed professor of social ethics at Harvard University. He will continue his connection with the Harvard Medical School and the Massachusetts General Hospital.

THREE HUNDRED THOUSAND DOLLARS for the erection of needed new buildings at the County Tuberculosis Hospital was included in the appropriation budget presented to the Marion County Council at their March session.

THE California State Board of Medical Examiners, during the past six years, has caused the arrest of 528 persons charged with practicing medicine without a license, and has secured conviction in 238 of the cases.

DR. E. B. MUMFORD of Indianapolis gave an address before the Fort Wayne Medical Society at the Chamber of Commerce the evening of

March 30. He spoke on "Tuberculosis of the Bone," and his address was followed by a luncheon.

PLANS are under consideration by the authorities of Johns Hopkins University to consolidate the libraries of the hospital, the school of hygiene, and the medical school in a new library building, to be erected in the hospital group.

THE annual commencement exercises for the senior class of the Lutheran Hospital Training School for Nurses, Fort Wayne, was held Wednesday evening, May 6, in the St. Paul's auditorium. Twenty-four nurses received their diplomas.

THE Frank S. Betz Company of Hammond has recently purchased the entire stock and business of the Crown Surgical Instrument Company and opened a complete exposition and sales room at 6 and 8 West Forty-Eighth Street, New York City.

THE temporary headquarters of the Hairston Memorial Hospital, Martinsville, are in the Burch Building. The hospital was recently destroyed by fire. The temporary headquarters have been equipped with modern furnishings for use as a hospital.

THE City Hospital at Terre Haute has just completed a big campaign to raise funds for the erection of a new addition which is much needed. For some time the hospital has been crowded to over legal capacity and the speedy erection of an addition is essential.

B. C. HENDRICKS, chiropractor of Kendallville, was fined \$100 and costs in the Noble Circuit Court last week on a charge brought by Dr. W. T. Gott, secretary of the State Board of Medical Registration and Examination, for practicing medicine without a license.

DR. JOHN A. MARSH, lieutenant, medical corps, United States Navy, formerly a physician of Indianapolis, but since the war attached to the medical corps of the navy, has been transferred to Indianapolis as medical examiner at the Marine Corps Recruiting Station.

SINCE April 15 the doctors of Attica have had no office hours after 5 p. m. on Tuesdays, Thursdays and Fridays. Calls have been an-

swered on these evenings. This new arrangement has been made in order that the physicians may have more time with their families.

THE Howard County Council appropriated \$52,000 on April 7 to build a county tuberculosis hospital, ending a controversy between the county officials and the Chamber of Commerce since the election of 1918, when the hospital was ordered by a vote of more than two to one.

THE New York Post-Graduate Medical School and Hospital has recently received a gift of \$100,000 to be used to provide practicing physicians with opportunities for post-graduate study at the New York hospital and school. The donor is Mrs. Henry R. Rea, of Pittsburgh.

THE year book of the Public Health Nursing Association for 1919 has comparative figures showing the large growth of association work since the organization in 1914. Last year the nursing staff made 25,205 visits, as against 5,560 visits in 1914. From 1,040 patients attended in 1914, the work has enlarged to 6,431 patients in 1919.

THAT a Health Department Hospital of Chicago is to be opened in the City School, was announced by Dr. J. D. Robertson, health commissioner of Chicago. The hospital, which will accommodate twenty patients, will afford means by which nurses may obtain a training course in three months. A charge of \$50 will be made for the course.

FREDERICK L. VAN SICKLE, M. D., recently appointed executive secretary of the Medical Society of the State of Pennsylvania, began his service Feb. 15. Stimulating the interest of newer members, reviving some of the older members, arousing enthusiasm for public health legislation, etc., comprise some of the duties of the new officer.

MILK dealers in Indiana are required to obtain licenses from health officers in the towns or cities in which they operate, according to new milk handling rules passed by the State Board of Health April 8. The board further established three grades of milk, and ordered dealers to obtain permits to label the milk they sell under one of the grades.

ALL bids for the erection of the Decatur County Memorial Hospital were rejected Saturday afternoon by the board of trustees. The lowest bid amounted to \$133,776 and the appropriation is \$100,000, \$3,000 of which has already been expended for a site. The architects have been requested to revise the specifications so that it will be possible to build within the appropriation.

A BILL has been introduced by Congressman Rogers of Massachusetts to transfer to the Bureau of War Risk Insurance the care of discharged sick and disabled soldiers and sailors. This work is now being cared for by the Public Health Service, but since the duties of the Bureau are directed exclusively to ex-service men, Congressman Rogers believes that the Bureau can best care for this work.

THE Fountain-Warren Medical Society met in Attica on April 1 in one of the most interesting meetings ever held by the organization. On this occasion the society honored two of its members, Dr. M. T. Case and Dr. George Rowland, who have been practicing physicians for more than fifty years. They were both made life members in the society and presented with gold engraved life membership cards.

ANNOUNCEMENT that the Indiana Manufacturers Reciprocal Association is to establish in Indianapolis at once, a physiotherapy hospital, wherein workmen, injured in industry in the factories of the association, are to be rehabilitated to a degree that will allow them to enter their fields of labor again, was made by Morris E. Nicholson, general manager of the Sherman and Ellis Compensation Service, at a dinner at the Columbia Club, April 17.

THE rapid growth of the American chemical industry is indicated by the announcement that the Abbott Laboratories have recently purchased twenty-six acres of ground in North Chicago and will soon commence building an additional plant for the exclusive manufacture of synthetics and other chemicals. Physicians and pharmacists are enthusiastically encouraging the idea of American independence in pharmaceutical and chemical lines.

THE regular meeting of the Dubois County Medical Society was held in Huntinburg March 31. The session was of more than usual inter-

est. Dr. J. C. Royce of the United States Public Health Service was present on invitation and delivered a lecture on "Venereal Disease Control." After deciding to launch a campaign against these diseases, a committee composed of doctors was appointed to arrange for public meetings, moving pictures and lectures.

A MOVEMENT has been launched in Baltimore to have the city take over the hospital at Fort McHenry for a general municipal hospital. Dr. John M. T. Finney has been named by the mayor as chairman of a committee to take the matter up with the Secretary of War and the Surgeon-General of the Army. If Fort McHenry Hospital is acquired by the city, Sydenham Hospital, the city hospital for infectious diseases, will probably be put to other uses.

DR. KENNETH A. J. MACKENZIE died March 15 at his residence in Portland, Ore. He was born in Manitoba in 1857. He was graduated in medicine from the McGill University in 1881, after which he became a licentiate of the Royal College of Physicians and Surgeons of Edinburgh. He was for many years professor of medicine of the medical department of the University of Oregon, later he became professor of surgery, and finally was elected dean of the faculty.

CONGRESS has been requested to appropriate an additional \$8,816,000, to meet the medical, surgical and hospital requirements of the Public Health Service, making a total appropriation of \$18,316,000, to care for sick and disabled soldiers and sailors for the fiscal year ending June 30, 1920. In a statement to the Secretary of the Treasury, Dr. Cummings says that the Public Health Service is now caring for 12,000 patients in hospitals and is examining over 3,500 new patients each week.

THE House Committee on Public Buildings and Grounds has approved the purchase by the Public Health Service of the Mount Alto property situated in the suburbs of Washington, D. C. This property will be used for the care and treatment of tuberculous patients. It now has a capacity of 125 beds, but it is planned to increase its facilities immediately to 300 beds and later it can be expanded to 2,000 beds. The property covers eleven and one-half acres and includes nine modern stone buildings.

A COMMITTEE of Chicago physicians has been appointed by the Chicago Medical Society and affiliated organizations to solicit funds for the relief of Vienna physicians. The committee consists of Dr. Rudolph W. Holmes, chairman of the committee of the specialist societies; Dr. Coleman G. Buford, chairman of the branch societies of the Chicago Medical Society; Dr. Effie L. Lobdell, chairman of the Chicago Woman's Medical Societies and Clubs, and Dr. Warren Johnson, chairman of the club and social associations.

GROUND was broken during the week of April 3d, in Rheims, for a million-dollar memorial hospital in France. The institution will have 150 beds permanently endowed, and every bed will have over it a sculptural tablet bearing the name of an American who fell on the battlefield of France. There will be a clinic for the civilian population, well equipped maternity and children's ward, and a dental clinic and dispensary. There will be sun parlors and gardens and special arrangements for the treatment of children suffering from malnutrition due to the war.

At a meeting of leading members of Oxford University and representatives of the medical profession both in Oxford and London, held March 6 at Oxford to consider a fitting memorial to Sir William Osler, the following resolution was passed: "In view of the intimate association of Sir William Osler's life work with the study of the origin and prevention of disease, the most appropriate form of memorial would be an Osler Institute of General Pathology and Preventive Medicine." General and executive committees were appointed to issue an appeal.

SHORT studies in Child Welfare represent a new method of adult education offered by the extension department of Indiana University. The short study is a non-credit course offered to any person who wishes to do some reading and study under the direction of university instructors. A series of ten studies has been prepared and new ones are now being arranged on community centers, play and recreation, boy problems, and similar topics. The series is offered for the use of public school teachers and clubwomen, and especially for mothers to provide a method of study adaptable to individual needs.

THE United States Civil Service Commission announces an open competitive examination for physician, Panama Canal service, May 5 and July 7, at various places throughout the United States. The entrance salary is \$200 a month with promotion to \$300 or higher for special positions. Both men and women are eligible. They must be unmarried, must be graduates of a recognized medical school, and must have had at least one year's graduate hospital experience. Application should be made to the Civil Service Commissioner, Washington, D. C., or the secretary of the local United States Civil Service Board.

DR. SAMUEL DOTY RISLEY, a prominent ophthalmologist of Philadelphia, died on April 1st. He was lecturer and assistant surgeon in ophthalmology in the University of Pennsylvania from 1872 to 1889; professor of disease of the eye in the Philadelphia Polyclinic from 1886 to 1900, and attending surgeon to the Wills Eye Hospital from 1889 to 1917. At various times he was president of the American Academy of Medicine, of the section on ophthalmology of the American Medical Association, and of the American Ophthalmological Society, and was a member of the American Otological Society, and of the American Climatological Society, and a fellow of the College of Physicians of Philadelphia.

THE Union District Medical Association met in its 105th semi-annual meeting, Thursday, April 22, in the Chamber of Commerce Building at Connorsville, with J. N. Study, president, in charge. The following program was carried out: "Thirty Years of Appendicitis," C. S. Bond, Richmond; "Retro-Deviations of the Uterus," Charles L. Bonifield, Cincinnati; "The Treatment of Syphilis as Practiced in the United States Public Health Service Clinics of Indiana," F. W. Cregor, medical director; "Diagnosis of Tuberculosis," Stephen C. Markley, Richmond; "Discussion of Post-Influenzal Complications," Frank B. Wynn, Indianapolis; "Diagnostic Significance of Blood Pressure," A. C. Kimberlin, Indianapolis.

THE forty-seventh semiannual meeting of the Northern Tri-State Medical Association and the annual meeting of the Elkhart County Medical Society was held in the K. of P. Building, Goshen, on April 8. The meeting was addressed by speakers from many of the prominent cities of Indiana and adjoining states. All

visiting physicians were entertained by the Elkhart County Society at a six o'clock dinner. Officers of the association are as follows: Tri-State—C. C. Terry, South Bend, president; Louis Miller, Toledo, vice-president; C. W. Haywood, Elkhart, secretary; J. A. Weitz, Montpelier, treasurer. Elkhart County Association—J. B. Porter, Elkhart, president; W. B. Page, Goshen, vice-president; S. T. Miller, Elkhart, secretary-treasurer.

SUNNYSIDE, Marion County institution for the treatment of tuberculosis, has recently been given \$350,000 to be used in the construction of new buildings. Work on these buildings will begin at once. An infirmary building with a capacity of seventy-five patients is to be built, which will enable the institution to care for advanced cases as well as early ones. A childrens' cottage of forty-five beds will also be built. This will be one of the most modern buildings of its kind in the middle West. It will contain every facility for treating all forms of tuberculosis found among children. A superintendent's residence will also be built. Several months ago \$100,000 was appropriated for a service building and a power house, and these are now nearly completed. The present capacity of Sunnyside is seventy-eight. With the completion of these new buildings the capacity will be 200.

THE King of England has ordered certificates issued in the following form to Cols. Christopher C. Collins; George W. Crile, Cleveland; Harvey Cushing, Boston; Mathew A. DeLaney; Robert U. Patterson; Harry L. Gilchrist; James D. Fife; Richard H. Harte, Philadelphia, and Lieut.-Col. Lucius L. Hopwood, M.C., U. S. Army, and to Miss Julia Stimson, superintendent of the nurses of the Medical Department, U. S. Army: "The war of 1914-1918. U. S. Army Medical Corps (name of recipient) was mentioned in a dispatch from Field Marshal Sir Douglas Haig, K.T.G.C.B., G.C.V.C., K.C.T.E., dated Nov. 7, 1917, for gallant and distinguished services in the field. I have it in command from the king to record his majesty's high appreciation of the services rendered. Winston S. Churchill, Secretary of State for War. War Office, Whitehall, R. W., March 1, 1919."

DURING April the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Abbott Laboratories: Anesthesin - Abbott; Aromatic Chlorazene Powder; Tablets Dichloramine-T-Abbott.

Diaprotein Company: Diaprotein Prepared Casein Flour.

Gilliland Laboratories: Streptococcus Vaccine (Gilliland).

Heyden Chemical Works: Acetylsalicylic acid-Heyden.

Hollister-Wilson Laboratories: Capsules Corpora Lutea Desiccated-Hollister-Wilson; Tablets Corpus Luteum Desiccated-Hollister-Wilson; Pituitol Obstetrical; Pituitol Surgical.

Lederle Antitoxin Laboratories: Pollen Antigen-Lederle (Spring Type).

Lowy Laboratory, Inc.: Solution Arsphenamine-Lowy.

Radio Chemical Corporation: Radium Bromide (Radio Chemical Corp.); Radium Carbonate (Radium Chemical Corp.); Radium Chloride (Radio Chemical Corp.); Radium Sulphate (Radium Chemical Corp.).

E. R. Squibb and Sons: Bacillus Bulgaricus-Squibb.

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County	Secretary	Date
1.	Decatur,	C. R. Bird.....	Feb. 1, 1920
2.	Fayette,	R. H. Elliott.....	Feb. 1, 1920
3.	Franklin,	E. M. Glaser.....	Feb. 1, 1920
4.	Fulton,	A. E. Stinson.....	Feb. 1, 1920
5.	Jasper-Newton,	O. E. Glick.....	Feb. 1, 1920
6.	Jefferson,	O. A. Turner.....	Feb. 1, 1920
7.	Marshall,	Harry Knott.....	Feb. 1, 1920
8.	Posey,	John Ranes.....	Feb. 1, 1920
9.	Shelby,	F. E. Bass.....	Feb. 1, 1920
10.	Sullivan,	J. B. Maple.....	Feb. 1, 1920
11.	Union,	J. D. Shonwald.....	Feb. 1, 1920
12.	Warrick,	J. F. Samples.....	Feb. 1, 1920
13.	Washington,	Claude B. Paynter.....	Feb. 1, 1920
14.	Wells,	G. B. Morris.....	Feb. 1, 1920
15.	Whitley,	H. M. Ego.....	Feb. 1, 1920
16.	Delaware-Blackford,	H. D. Fair.....	March 1, 1920
17.	Hancock,	C. H. Bruner.....	March 1, 1920
18.	Knox,	D. H. Richards.....	March 1, 1920
19.	Madison,	Doris Meister.....	March 1, 1920
20.	Monroe,	J. E. P. Holland.....	March 1, 1920
21.	Scott,	J. P. Wilson.....	March 1, 1920
22.	White,	H. B. Gable.....	March 1, 1920
23.	Marion,	Leslie H. Maxwell.....	April 1, 1920
24.	St. Joseph,	R. B. Dugdale.....	April 1, 1920
25.	LaGrange,	A. J. Hostetler.....	April 1, 1920
26.	Miami,	M. L. Wagner.....	April 1, 1920
27.	Steuben,	Mary Ritter.....	April 1, 1920
28.	Tiptecanoe,	W. M. Reser.....	April 1, 1920
29.	Wabash,	L. O. Sholty.....	April 1, 1920
30.	Fountain-Warren,	A. M. Sullivan.....	May 1, 1920
31.	Henry,	W. H. Stafford.....	May 1, 1920
32.	Jay,	C. A. Paddock.....	May 1, 1920
33.	Montgomery,	A. L. Loop.....	May 1, 1920
34.	Vanderburg,	William E. Barnes.....	May 1, 1920

INDIANAPOLIS MEDICAL SOCIETY

March 2, 1920

In Dr. Taylor's absence the meeting was called to order by Dr. Max A. Bahr, first vice president. Minutes of previous meeting were read and approved. The application of Dr. R. J. D. Peters was read for the first time. The applications of Drs. Luther D. Williams and J. Oscar Ritchey were read for the second time and referred to the Council. Dr. Foxworthy announced the meeting of the American Life Convention at French Lick, March 10, 11 and 12, and hoped some of the members would be able to attend.

Program: Paper, "Some Evidences of Focal Infection," Dr. S. E. Earp.

Abstract.—Dr. Earp discussed the application of the term rheumatism as a misnomer but admitted that it had a value for the purpose of description in some instances. The symptomatology and etiology as applied to rheumatic fever was outlined and some stress placed on the term arthritis. In all instances careful search must be made for an infectious process. Mention was made of the oral cavity, gastro-intestinal tract and pus tubes. Five case reports were given illustrating secondary arthritis, gonococcal, syphilitic and streptococcal infection. Certain heart affections were described wherein the cause could be traced to some infectious process. Mention was made of the tonsils. While the essayist thought in some instances there was a ruthless extraction of teeth, it must be acknowledged that periapical abscesses may be undiscovered and be responsible for a pathological lesion of the lung, heart, kidney, gastro-intestinal tract and elsewhere. Credit was given the roentgen ray as an aid to diagnosis but caution was suggested in obtaining a correct interpretation, since there is cause for much error. Earl was quoted as saying that those who advise a departure from the generally accepted rule of "Where there is pus evacuate" falls the burden of proof. Attention was called to the fact that pathogenic bacteria have a predilection for the serous and synovial membranes then we may expect a morbid process, such as meningitis, endocarditis, pleuritis, etc. Particular stress was placed on the protective power of the body, the so-called power of resistance. If this is lessened by age or otherwise, we may see evidence of a pathologic process wherein the organism is latent or inactive and waiting for an opportunity, which may be accepted when the bodily resistance is lowered. Attention was called to the influence of toxins and numerous other causes in lowering resistance and much emphasis was placed on the importance of preventive medicine.

Case Report: "Multiple Infections," Dr. J. H. Eberwein.

Abstract.—There is some history of cancer and tuberculosis and also rheumatism in the family. Patient in good health until two years ago when a pelvic disturbance was noticed. Came to the hospital with rheumatism as her chief complaint. Had had three attacks, the last one preceded by a cold and pleurisy. Physical examination and laboratory tests showed that nearly every organ in her body was involved by inflammation. She was sent to the Mayo Clinic where tonsillectomy, curettement and trachelorrhaphy was advised. But she was sent home on account of her very bad general condition. It seemed that this patient had some three or four serious things giving

her trouble, changing from one to another all during her stay at the hospital. Several different operations were done and many complications came up during her stay. First she had a pelvic operation consisting of dilatation, curettage and trachelorrhaphy and double salpingectomy. Later she developed a perirectal abscess which was operated. She had a suppurative inflammation from a fistula sacrococcygea which was operated, drained and at a later time was dissected out completely. She had cholecystitis, hepatitis, splenitis, nephritis, pleuritis, pneumonia, endocarditis, tonsillitis, phlebitis and several other things as complications during her stay at the hospital. She later had a tonsillectomy and at a still later date had her teeth all extracted. All these operations were done either with a local anesthetic or with gas oxygen. Patient made a complete recovery.

DISCUSSION

Dr. L. H. Maxwell: Word rheumatism is very inaccurate. Serves purpose of dodging the issue in diagnosis. Formerly perhaps this term permissible but with present day knowledge of infection and their manifestations we have more definite terms. Focal infections long recognized but only recently closely studied. Dr. Benjamin Rush, one of the signers of the Declaration of Independence, reported amelioration of symptoms following extraction of decayed tooth. Are now able to get some results in kidney infections. Hematogenous kidney treatment of focal infection responsible for improvement and cures.

Dr. Beasley: Focal infections take in whole field of medicine. Diagnosis is difficult. Tendency is to single out one disease or symptom to treat. Overlook cause, subsidiary infections. Timely to have attention called to focal infections. Normal appearing teeth and tonsils often bad underneath. Keep careful histories from beginning.

Dr. Strickland: Acute attack generally from focal infection. In chronic conditions without outstanding features no foci to be found. Metabolism normal, therefore difficult of diagnosing. Cited case no apparent trouble with teeth or tonsils and basal metabolism normal. Removed pivot tooth and found necrosis of superior maxilla. Curettement relieved condition. Individual reaction to disease varies with person. Influence of glands of internal secretion perhaps overlooked. Must have early observation of subjective symptoms.

GENERAL DISCUSSION

Dr. G. B. Jackson: Cited case of multiple infection. Abscess of scalp. Treated for erysipelas. Incision of scalp and drained. Pneumonia, two weeks later empyema. Developed cystitis; later arthritis finger; scrotal abscess; abscess of prostate. Called attention to genital tract as focus. Erosion of cervix, pus tubes, etc., as foci.

Dr. Edwards: With leukopenia cannot get isolation of organism from blood stream. Removal of tonsils often clears condition. Sequence of infection in which gallbladder, ovary, tube or any potential area of infection (tissue lymphoid). In chronic cases sooner or later will be "shower" of infection (casts, pus, blood). Must follow for weeks to find same. Any organisms may be that cause. Streptococcus hemolyticus in acute, Streptococcus viridans in chronic cases.

Dr. Carmack: Nose accessory sinus and lymphoid tissue in nasopharynx must be noted as possible foci.

Subacute and chronic tonsils give main base of infection. Get history.

Dr. Jaeger: May joint condition be due to local acidosis? Alkalinization gives relief. Cited cases—Woman, 60, with tic douloureux; joint pains, flatulency, fissure, adenitis, chronic appendicitis, hyperacidity and enlarged tonsils. Tonsils, teeth, appendix removed. No improvement. Anterior pituitary gland gave very good results.

Dr. Sluss: Rheumatism a term which will remain indefinitely because it is convenient and gives a certain clinical entity. Focal infections: Case began with osteomyelitis followed by trephining all long bones. P. M. showed only focus in mastoids.

Dr. Humes: Case 1, sciatica; blood and spinal fluid negative. Teeth good looking but were radiographed. One incisor showed shadow. Cut into and pus drained with relief of symptoms. Case 2—Tonsils out in New York; teeth out in Colorado; pain in head and back; lung negative; blood gave.

Dr. McCaskey: Latent infections are not sufficiently noted. Waiting for lowered resistance. Tonsillectomy often performed with hope of giving good results. Sometimes fails. Accessory sinuses not well studied. Same with chronic discharging ear. Fortunately, not so many teeth removed now. Focal infections are now very carefully studied.

Dr. Schweitzer: Too little attention has been given to the sequelae of the acute infections of childhood. Medical examinations of children at regular intervals, followed by any indicated treatment go far in helping to prevent the establishment of infective foci which are likely to become centers of chronic systemic disturbance.

Dr. Earp, closing: Very much pleased that so much discussion was brought out and that the society as a whole was interested enough to remain.

Attendance 65. Adjourned.

March 9, 1920

Meeting called to order by the president, Dr. James H. Taylor. The application of Dr. Charles A. Weller was read for the first time. Dr. J. Oscar Ritchey and Dr. Luther Williams were elected to membership.

The amendments to Constitution and By-Laws were accepted by the society. The secretary was instructed to cast the vote of the society for Dr. Frank B. Wynn for librarian.

Program: Paper, "Diagnosis and Treatment of Toxic Goiter," Dr. E. F. Kiser.

Abstract.—Our knowledge of exophthalmic goiter dates back to the early years of the Nineteenth Century. Flajani, Graves, Basedow and Parry were among the pioneer investigators. The etiology is questionable, but probably has to do with disturbances in several of the endocrine glands. Recognition of well advanced cases is easy but diagnosis of borderline cases in which perhaps but a single suggestive symptom exists is exceedingly difficult. Among the most important of the newer tests are a study of basal metabolism. Goetsch's adrenalin test, study of alimentary hyperglycemia and the diagnostic feeding of thyroid extract. Treatment of mild cases may be successful without resort to surgery, but most of the more advanced cases require thyroidectomy with careful after treatment under the care of a skilled physician. Success in treatment depends in each case on careful individualization and there must be full co-operation of surgeon and internist.

Paper, "Surgery of the Thyroid," Dr. J. F. Barnhill.

Abstract.—Successful surgery of the thyroid depends much on accurate diagnosis. Diagnosis usually is easily made in nontoxic simple goiters. In thyrotoxic cases great difficulty may be experienced in differentiating case from hysteria and other neuroses. Severe thyrotoxicosis may be present in cases having but slightly enlarged thyroid, and even when there seems no enlargement at all. This fact should be emphasized. Laboratory tests, the metabolic rate measurements, are helpful and perhaps essential in some cases. The internists and the surgeon should have joint charge of such cases. Operation should not be undertaken in severe cases until diagnosis is certain and proper preoperative attention has been given. When accurate diagnosis is made and adequate preparation provided, successful surgery is a matter largely of surgical mechanics and surgical judgment. The chief points emphasized were: A trained anesthetist to minimize loss of blood. Ligation of upper poles in all severe cases and then operate at earliest period of safety. Amount of glandular tissue to be removed depends on history of case, nature of structure and operative judgment of surgeon. Transglandular resection advocated, except in case where one lobe is enlarged and the other entirely normal. Methods of safety in dealing with recurrent laryngeal nerve and parathyroids discussed. Is possible to remove capsule and yet preserve intact these important structures. Absolute safety, however, depends on leaving portion of posterior capsule. Recovery from operation does not mean that all cases will recover full health. This should not be expected in severe heart and nerve cases. Recovery or partial recovery and prolongation of life is the rule, and thyroidectomy is the best known method of treatment for nonmedical cases of goiter.

DISCUSSION

Dr. A. C. Kimberlin: Differential diagnosis is one of the most difficult problems. Hyperthyroidism may be very transitory; often masked by other conditions. Really takes a psychologist to diagnose incipient and anomalous forms. Medical treatment does not enjoy any distinction. Medical men not sure of themselves. Surgeons are therefore more successful. First get confidence of patients and later persuade them to line of treatment, whether medical or surgical. Ligation good in toxic, hyperplastic gland.

Dr. E. D. Clark: Probable reason for bad results with hyperthyroidism is early operation. Not many showing profound conditions are going to be cured by medical treatment. Gland has been changed and must be removed. Goiter surgery now satisfactory. Many cured, many permanently improved. Metabolic tests to be recommended. Dangers: (1) Hemorrhage; (2) injury to recurrent laryngeal; (3) injury to parathyroids; (4) infection—for anesthetic—gas and local anesthetic control of hemorrhage into muscles. Clamp near capsule and sew over.

Dr. W. D. Gatch: Marrine of Cleveland experimented with K. I. as prophylactics on schoolchildren. Followed for two years. Those given K. I. had no evidence of goiter. Thyroid secretion most powerful activator of metabolism in body. Puberty, pregnancy, infections and also early tuberculosis possible causes. Thyroid secretion as bone callous, superabundant. Provision of nature. Basal metabolism test difficult. Trained man and patient at rest or under same conditions. Simple weighing a criterion. Constant loss of weight indicative. For prognosis

rely on cardiovascular system condition. Have pulse below 100 for operation. Rest and ice bag. Light ether best anesthetic. Credit for subtotal thyroidectomy goes to Finney. Rational because patient does not need much thyroid tissue.

GENERAL DISCUSSION

Dr. J. R. Eastman: Operation under local anesthesia better. Has operated many cases under ether. Use of novocain and adrenalin preceded by morphin and atropin has advantages: (1) Dissection easier; (2) hemostatis easier attained; (3) anoci-association; (4) elimination of trauma to heart, lungs and kidneys; (5) no excuse for injury to recurrent laryngeal with patient balking; (6) no nausea; (7) able to eat. Ligate as you go and do not use innumerable clamps.

Dr. H. O. Pantzer: Called attention to analogy of course and attitude toward goiter at present and female genitalia in past years as regarded tendency to operate. Toxemia from local irritation of gland give hyper condition. Many have localized infection, therefore after removal of a portion of the hyperplastic gland it will continue to proliferate with a return of symptoms. Cited a case of removal of uterine fibroid followed by decrease in size of thyroid. Later a tonsillitis caused an enlargement of thyroid which cleared up with a tonsillectomy.

Dr. Kiser, closing: Dr. Crile exercises prophylaxis in children of thyroid parents. Use hydriodic acid giving as many drops as years old.

Dr. Barnhill: In the beginning goiter case is a problem for the general practitioner. When it comes to surgery both medical man and surgeon should confer. Ligation and then operation several days later too much surgery. Might as well remove. Laboratory tests of utmost importance.

Attendance 97. Adjourned.

L. H. MAXWELL, Secretary-Treasurer.

THIRTEENTH DISTRICT

The 30th semi-annual meeting of the Thirteenth District Medical Society was called to order at 1:45 p. m. March 18, 1920, by President C. N. Howard in the Elks' Temple, Elkhart, Ind.

The minutes of the previous meeting were read and approved.

The report of the treasurer was read and referred to the auditing committee, Drs. S. T. Miller, C. W. Frink and H. N. McKee. The committee found it correct and reported accordingly.

The invitation by the Kosciusko County Medical Association that the autumn meeting be held in Warsaw was accepted by a unanimous vote of the society.

Dr. F. H. Kelley, Argos, read the first paper—subject, "Surgical Technique in Home Obstetrics." Discussion was offered by Drs. J. C. Fleming, Elkhart; A. C. McDonald, Warsaw; S. C. Barwick, Elkhart; W. Q. Harper, Millersburg; H. W. Hall, New Carlisle, and F. H. Kelly in closing.

The second paper, "Blood Pictures in Surgical Diagnosis," was presented by Dr. W. H. Hillman, South Bend. Discussion: Drs. M. W. Lyon, South Bend; H. M. Miller, South Bend; S. O. Barwick, Elkhart; J. C. Fleming, Elkhart; W. H. Hillman, closing.

After five minutes recess, Dr. E. J. Lent, South Bend, gave a paper on "Some Observations on the Physiology and Pathology of the Sinuses and Teeth," which was illustrated by lantern slides. This was

supplemented by a discussion of the "Pathology of Epulis," by Dr. M. W. Lyon, South Bend. Discussion: Drs. H. W. Eby, Goshen; J. A. Stoeckley, South Bend; C. N. Howard, Warsaw; J. B. Porter, Elkhart; P. C. Traver, South Bend; J. C. Fleming, Elkhart; G. C. Kasdorf, Michigan City, and E. J. Lent, South Bend, in closing.

Sixty members and guests attended the dinner in the dining hall of the Elks' Temple.

The after-dinner address was given by Dr. E. M. Hoover, Elkhart, on the subject: "Sir William Osler: An Estimation of His Life." On motion of Dr. G. W. Thompson, Winamac, the secretary was instructed to send a copy of the address to the Editor of the Journal of the Indiana Medical Association for publication therein.

Adjourned.

JAMES A. WORK, Jr., Sec.-Treas.

DECATUR COUNTY

The Decatur County Medical Society has outlined an unusually interesting and valuable program for the summer months. On April 2 the society held a "get-together" meeting which included supper and a business meeting following. A resolution was passed to the effect that an honest effort would be made to increase the knowledge of medicine and cultivate a more fraternal spirit among the members of the profession.

The following letter has been sent to every member of the Decatur County Society outlining the plans for the months to come:

Dear Doctor: In the future the Decatur County Medical Society will meet regularly every two weeks. A definite line of work will be followed, using the Autopsied Case Reports as issued by the Massachusetts General Hospital, under the direction of Dr. Cabot.

These meetings will be full of interest, and we hope worth your while making a special effort to be present.

Each meeting will be in charge of a member detailed as the leader, beginning April 16th with Dr. Tindall, and taking the membership thereafter in alphabetical order.

Next Friday we will meet at 6:30 p. m. at Roberts' dining-room, where supper will be served at sixty cents, after which we will meet at 7:30 at the K. of P. club rooms.

It is planned to repeat this feature once each month. Other meetings will be at 7:30 sharp, and you will not be detained later than 9:30.

Each member present at these meetings will be allotted 2 minutes for discussion of the topic at hand, and it is hoped that we may not use up a great lot of time in unnecessary side discussions.

Inasmuch as arrangements must be made in advance for a definite number who expect to be present, will you be good enough to notify the secretary not later than Thursday evening whether or not you will be here. It may be stated that word to the effect you are to be present obligates you in so far as the supper is concerned to be responsible for the amount charged for each plate at the restaurant, which in the future is sixty cents.

The society hopes you will lend your help and support by being present whenever it is possible, and promises as good returns as our united effort can make.

Fraternally,

C. R. BIRD, Secretary.

FOUNTAIN-WARREN

The Fountain-Warren County Medical Society met April 1 at Attica, with the following program: "The Small Hospital," Dr. J. L. Smith, Chicago, of the staff of American College of Surgeons; "Clinical Talk on Empyema," Dr. A. C. Kimberlin, Indianapolis; "The Evolution of the Railway Surgeon," Dr. George F. Beasley, Lafayette; "The History of Fountain-Warren Medical Society," Dr. George Rowland, Covington.

This meeting was called in honor of two of its active members, Dr. George Rowland of Covington and Dr. M. T. Case of Attica, each of whom has been in continuous practice fifty or more years. The society presented them with specially engraved life-membership cards at a sumptuous dinner which was served at the close of the program.

Adjourned.

Dr. C. G. BECKETT, Pres.

Dr. A. M. SULLIVAN, Sec.-Treas.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1920, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

BACILLUS BULGARICUS-SQUIBB.—A culture in vials of the *Bacillus bulgaricus* Type A, the *Bacillus bulgaricus* Type B (*Bacillus acidophilus*) and the *Bacillus paraceticus*, each vial containing 12 Cc. The preparation is designed for internal administration and for topical application (see general article, Lactic Acid-Producing Organisms and Preparations, New and Nonofficial Remedies, 1920, p. 156). E. R. Squibb and Sons, New York.

POLLEN ANTIGEN-LEDERLE (SPRING TYPE).—A liquid obtained by extracting equal parts by weight of dried pollens of timothy, red top, June grass, orchard grass, sweet vernal grass, meadow foxtail, meadow fescue, rye and wheat by a vehicle of 67 per cent. glycerine and 33 per cent. saturated solution of sodium chloride. Each Cc. contains 14,000 pollen units (a pollen unit is the equivalent of 0.001 mg. of pollen). For a discussion of the actions, uses and dosage, see Pollen Extract Preparations, New and Nonofficial Remedies, 1920, p. 236. The product is supplied in fifteen different doses, each dose consisting of 0.1 Cc. of the respective dilution. Each dose is accompanied by a vial containing 9 Cc. of sterile water for diluting the dose to make it of isotonic strength. Pollen Antigen-Lederle (Spring Type) is supplied in packages containing a complete set of fifteen doses, in packages containing sets of five doses and as a diagnostic test consisting of 0.01 Cc. of No. 15 dilution. Lederle Antitoxin Laboratories, New York (*Jour. A. M. A.*, April 24, 1920, p. 1167).

PROPAGANDA FOR REFORM

SOME MISBRANDED NOSTRUMS.—The following "patent" medicines have been the subject of prosecution by the federal authorities: Mendenhall's No. 40 for the Blood, consisting essentially of potassium iodid, cathartic resins, ammonium acetate, licorice,

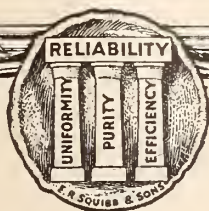
glycerin, sugar, alcohol and water; Zaegel's Essence, consisting essentially of alcohol, water, sugar and plant extractives, including a laxative substance and a saponin; Zaegel's Lung Balsam, consisting essentially of alcohol, water, sugar and laxative plant material flavored with oil of peppermint; McGraw's Liquid Herbs of Youth, containing essentially Epsom salt, senna, red pepper, quassia, alcohol and water with wintergreen flavor; Jarabe de Abrozoin, composed essentially of terpin hydrate, menthol, benzoic acid, ammonium chlorid, sodium bromid, glycerin, alcohol, sugar and water; Kampfmuehler's Rheumatic Remedy, consisting essentially of potassium iodid, plant extractives, alcohol and water; Sal-Sano, containing essentially sodium chlorid, sodium phosphate, sodium bicarbonate and sodium sulphate; Indian Wyanole, consisting essentially of chloroform, ammonia, menthol, glycerin, turpentine-like oils, alcohol and water; Gregory's Antiseptic Oil, consisting of kerosene oil with oil of cloves, cassia, and sassafras with a trace of camphor and pepper resins (*Jour. A. M. A.*, April 17, 1920, p. 1114).

LOOK UP ITS RATING.—The Council on Pharmacy and Chemistry was created because the complexity of modern medicine makes it a physical impossibility for physicians to know the scientific status of the many proprietary remedies which are on the market. As commercial agencies, such as Bradstreet and Dun, report on the commercial probity of individuals and firms, so the Council on Pharmacy and Chemistry reports on what might be called the scientific probity of proprietary and unofficial pharmaceutical products. The commercial agency issues, at no small expense to its customers, rating books; the Council on Pharmacy and Chemistry issues, at a nominal price, "New and Nonofficial Remedies." The commercial agency, for a substantial fee, will furnish reports on business concerns; the Council on Pharmacy and Chemistry, will, without any expense to the profession, furnish reports on proprietary products used for the relief or cure of human ailments (*Jour. A. M. A.*, April 24, 1920, p. 1171).

ADULTERATED OR MISBRANDED MINERAL WATER.—Harris Spring Water, examined by the U. S. Bureau of Chemistry, was found to contain *B. coli* in small quantities, molds and liquefying organisms. Sprudel Concentrated Spring Water was found to contain bacilli of the colon group and also added salts not obtained from the West Baden Springs. American Apollinaris Mineral Water was found not to be Apollinaris Water. Robinson Spring Water was falsely claimed to be effective as a remedy for Bright's disease, diabetes, dropsy, cystitis, gout, rheumatism, indigestion, and kidney and bladder troubles. Ferro-Manganese Regent Water was falsely represented as a remedy for alcoholism, chronic rheumatism, dyspepsia, diabetes, Bright's disease, albuminuria, dropsy, sciatica and insomnia, and was not a natural spring water (*Jour. A. M. A.*, April 24, 1920, p. 1182).

ALKALITHIA.—Keasbey and Mattison Company's Effervescent Alkalithia was introduced at a time when it was believed that the administration of lithium salts served to remove uric acid from the system. The A. M. A. Chemical Laboratory reported that Alkalithia is an effervescent mixture which contains alkaline carbonates and bicarbonates together with caffeine, free tartaric acid and free citric acid and that, as taken, it represents caffeine in solution of alkali tartrate, citrate and bicarbonate containing free carbonic acid. The Council on Pharmacy and Chemistry declared Alkalithia inadmissible to New and Nonofficial Remedies because the claims made on the label and in the cir-

(Continued on Adz. p. xviii)



IMPORTANT

SQUIBB BIOLOGICALS

AT THIS TIME OF THE YEAR

For the Treatment of Pneumonia

especially of Type I, (Lobar Pneumonia)

Anti-Pneumococcic Serum is of great value. It should be used early in large quantities and full doses repeated every six hours until the crisis is passed; also **Anti-Streptococcic Serum** is important for pneumonia in addition to anti-pneumococcic serum. It is best not to use the two mixed, but to administer each separately as the symptoms and bacteriological findings demand.

Anti-Streptococcic Serum Squibb is useful also in post-partum or puerperal sepsis, in erysipelas, and for septic conditions due to wounds infected with streptococci.

For Increasing Phagocytosis in Sepsis

Leucocyte Extract is of paramount importance, either in conjunction with vaccine and serum, or alone if the exact pathogenic microorganism can not be determined.

For the Prevention and Cure of Diphtheria

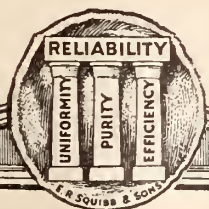
Diphtheria Antitoxin (Globulin) yields desired results. It is small in bulk for the number of units contained.

For the Prevention of Small-Pox

Small-Pox Vaccine is the trustworthy prophylactic.

Reprints giving detailed information will be furnished on request

E. R. SQUIBB & SONS, NEW YORK
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.
80 BEEKMAN STREET



A House of Service

3--*Manufacture of Therapeutic Agents*

THE house of Parke, Davis & Company has specialized for 53 years in the manufacture of therapeutic agents. As in other fields of human endeavor, this period has been marked by continuous improvement in products and processes.

For instance, the first pepsin, made forty-six years ago, had a digestive power of 1:12; that is, one grain would digest twelve grains of coagulated albumin. Its potency was increased to 1:100 seven years later, and subsequently to 1:500.

Today this house is producing pepsin which has a digestive power of 1:10,000, or more than eight hundred times the potency of the original product and over three times the standard requirement of the United States Pharmacopœia.

The first diphtheria antitoxin made by Parke, Davis & Company, a little over a quarter of a century ago, contained an

average of one thousand units to the dose.

Today, in the daily routine of the laboratory, diphtheria antitoxin is produced that makes it possible for physicians to administer ten thousand units or more in a single dose—an antitoxin that is approximately ten times as potent as that supplied twenty-five years ago.

Parke, Davis & Company were pioneers in the manufacture of glandular extracts, and their discoveries and improved methods have contributed materially to the development of the new science of endocrinology.

The suprarenal gland, for example, was used only to a limited extent in medicine until Adrenalin was made available to physicians. Likewise, the therapeutic value of the pituitary gland was unknown until this house gave to physicians a highly refined product, now recognized as the most potent oxytocic extant.

PARKE, DAVIS & COMPANY

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 6

FORT WAYNE, IND., JUNE 15, 1920

PER YER, \$2.00
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES	PAGE	EDITORIALS	PAGE
Sir William Osler. An Estimation of His Life. E. M. Hoover, M.D., Elkhart.....	191	Socializing the Medical Profession.....	203
The Physician. A Gentleman of Culture and Character. Frank B. Wynn, M.D., Indianapolis.....	195	Improvement in Hospital Service.....	204
The Mechanical Aids in Diagnosis of Lesions of the Upper Urinary Track. J. S. Eisenstaedt, M.D., Chicago....	197	Lay Anesthetists.....	205
Darning Needle in the Lung. Case Report. J. N. Study, M.D., Cambridge City, Ind.....	200	Indiana University Centennial Celebration.....	206
Fracture of the Calcaneus. E. B. Mumford, M.D., Indianapolis.....	200	Self-Drugging and Its Cause.....	206
		Editorial Notes.....	207
		MISCELLANEOUS	
		Deaths.....	210
		News Notes and Personals.....	211
		The Truth about Medicines.....	224
		SOCIETY PROCEEDINGS	
		Indianapolis Medical Society.....	217
		Johnson County.....	224
		Montgomery County.....	224

NEXT ANNUAL SESSION, SOUTH BEND, SEPT. 22, 23, 24, 1920.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103, ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

Just off Press, New (8th) Edition

HARE'S

Symptoms in the Diagnosis of Disease

LABORATORY investigation, by the brilliancy of its results in obscure cases, has served to divert attention from the careful study of the patient which is usually the chief method by which a correct diagnosis can be made. The well-trained physician carefully notes the symptoms, gives to each its proper value, and, if need be, makes his laboratory investigations afterward. As laboratory diagnosis is now so highly developed that it requires special books for its adequate description, the author has omitted laboratory methods from his text, desiring to lay special emphasis on *symptomatology*.

This volume is essentially devoted to a plan whereby a recognition of symptoms will lead the physician to a diagnosis. To accomplish this the symptoms used in diagnosis are discussed first, and their application to determine the character of the disease follows. Thus, instead of describing locomotor ataxia or myelitis, there will be found in the chapter on the Feet and Legs a discussion of the various forms of loss of power in the legs, so that the physician who is consulted by a paraplegic patient will be able readily to reach a diagnosis. In the chapter on Cough and Expectoration it is pointed out that hemoptysis may be due not only to pulmonary tuberculosis, but also to cardiac valvular disease, to pulmonary infarction, thoracic aneurysm, bronchiectasis and purpura, and these facts lead to differentiation. So, too, in the chapter on Vomiting, its significance, both local and remote, is discussed.

In other words this book is written upon the plan which is actually followed in practice, namely, the upbuilding of a diagnosis by grouping the symptoms.

By HOBART AMORY HARE, M.D., B.Sc., Professor of Therapeutics and Diagnosis, Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital. Octavo, 562 pages with 195 engravings and 9 Plates. Cloth, \$6.00 net.

PHILADELPHIA

LEA & FEBIGER

NEW YORK

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., JUNE 15, 1920

NUMBER 6

ORIGINAL ARTICLES

SIR WILLIAM OSLER

AN ESTIMATION OF HIS LIFE *

E. M. HOOVER, M.D.
ELKHART

Sir William Osler was one of earth's master spirits. By the manner of his life he so impressed himself on his generation that his name will not be forgotten as long as the memory of his time lasts. He was the most prominent physician in the English speaking world during more than a quarter century. His successor at Johns Hopkins, writing in a recent issue of *The Nation*, says of him: "It is probable that there has, in America, been no man so revered, no man whose power, whose inspiration, has reached so many, no man so loved."

The writer never was privileged to sit at his feet, never saw his face nor heard his voice, yet in a very definite sense does he consider William Osler his teacher, not alone within the narrow limits of subjects medical, but also as regards that larger sphere of life into which a real physician must needs extend his influence in order to justify his claim on the respect of the public.

A just and adequate estimation of his life is impossible; for generation after generation will yet feel the power of his influence and those on whom it will fall to make the advances in medicine will continue to look to his life for inspiration for the task to which they will put their hands. He belongs in the class of whom Lowell said:

"For the best part of their life on earth is when
Long after death
Their thoughts . . . have become
Part of the necessary air men breathe:
When like the moon, herself behind a cloud,
They shed down light before us on life's sea
That cheers us to steer onward still in hope."

Wherein lay the power of his life? What are the secret springs of his overmastering influence?

William Osler had the good fortune of being well born. The warp of his life was fashioned from the finest material—delicate, yet strong, fit to receive the finest and the noblest woof of the shuttle of time ever unwound from her mystic coil. Nor was the woof wanting. His life spanned a period of seventy years of world history, a period of surpassing importance, a period during which science in general and medicine in particular, made greater progress than twenty-five centuries immediately preceeding had witnessed. Concerning this age he declared, "To have lived right through an epoch matched only by two in the story of the race; to have shared in its long struggle; to have witnessed its final victory; to have done this has been a wonderful privilege. To have outgrown age-old theories of man and of nature . . . to have lived in a world remaking, these are among the thrills and triumphs of the Victorian of my generation." The consciousness of a fine native endowment and the opportunity of living in an age of unsurpassed advantages only deepened his sense of obligation to the world in which he lived.

The color and the trend of a life depend largely on the influence of other lives. Especially is this true during its formative period. Life's meaning can not be estimated without taking this into account. Not only is youth's plastic epoch but manhood's prime and age's decline indebted to this mighty force. Stability of character depends to a marked degree on the proper selection of this influence.

In his boyhood, William Osler had a teacher, Father Johnson, priest of the parish of Dundas. His association with this man awakened in him a deep reverence for the great minds of the past. Early in life he began making the thoughts of these his master thoughts. It was Father Johnson who introduced him to the Religio Medici of Sir Thomas Brown. This book was

* Read before the Thirteenth District Medical Society, Elkhart, March 18, 1920.

the second he purchased; it became, and ever remained, the most precious one in his library. From the subtle influence that emanated from this volume he never escaped. In an address before the students of Toronto University he called the names of three men to whom he said he "owed success in life—if success means getting what you want and being satisfied with it." These were Rev. William Arthur Johnson, his first teacher; Dr. James Bovell, Toronto School of Medicine, and Dr. Robert Palmer Howard, McGill University. Of the last named, in his farewell address, University of Pennsylvania, he said: "The man from whom, more than any other, I received inspiration, and to whose example and precept I owe the position which enables me to address you today. . . . I say to have known Palmer Howard was in the deepest and the truest sense of that phrase a liberal education." To these three teachers he dedicated "The Principles and Practice of Medicine."

What had these men bestowed that provoked him to pay this tribute to their memory. Was it because of the practical knowledge they had imparted to him or the prestige he had gained from his association with them? They had bestowed something better; something the value of which was incomparable. They had given him of their lives. They were more than mere instructors; they were teachers. He had received from them, not alone scientific facts, but what was much more valuable—inspiration to fan into flame the torch by which these, if lost, could again be found. In concluding his tribute to Palmer Howard he quoted these lines:

"Whatever way my days decline,
I felt and feel, though left alone,
His being working in my own,
The footsteps of his life in mine."

This, no doubt, is the expression of the measure of his debt to each one of these three teachers. Thus, they lived again in the life of their pupil, stirring that life to efforts that never die. It is by this means that the progress of the race is made secure. The pupil in turn becomes teacher, and through this lineage descend the ideals and the aspirations that make life worth while.

He was a lover of antiquity, but his interest in the ancient world was that of an historian rather than of an antiquarian. A finely developed sense of continuity led to trace the stream of life as it flows today back to its origin. This was not the backward look of the "worshiper of light ancestral," but the forward look of the prophet. He looked to the living past and there discovered the future.

Especially was he interested in the men of ancient Greece. The unspoilt freshness of her great teachers and her scientists had a tremendous attraction for him. Socrates, Plato and Hippocrates to him were living forces. They were great teachers and scientists, not because of the correctness of the body of knowledge they possessed and taught, but because of their methods. Greek civilization is not dead. Osler held with Main that "Except the blind forces of Nature, nothing moves in this world which is not Greek in origin." In a notable address, "The Old Humanities and the New Science," delivered before the Classical Society at Oxford, May, 1919, pleading for a better recognition of literature and the classics in the curricula of our colleges, he said: "One of the marvels, so commonplace that it ceases to be marvelous, is the deep rooting of our civilization in the soil of Greece and Rome—much of our dogmatic religion, practically all the philosophies, the models of our literature, the ideals of our democratic freedom, the fine and the technical arts, the fundamentals of our science and the basis of our laws. The humanities bring the student in contact with the master minds who gave us these things—with the dead who never die, with those immortal lives, not of now nor of yesterday, but which always were."

His love of history revealed itself throughout his writings. It is in evidence even in "The Principles and Practice of Medicine." It was his judgment that by the historical method only can many of the problems of medicine be approached profitably. He laid emphasis on the historical consideration of the great diseases which was necessary to the proper mental perspective so valuable an equipment in a student of medicine. Those of his pupils who had the inclination to follow him received a vast amount of culture from the pursuit of the medical science.

The honors that came to him were many, but the ones he prized most highly were the letters of friendship from men he had never seen. This moved him more and pleased him better than university degrees. Not only did he hold a friend as earth's best gift, but to be one, life's supreme privilege. This was the innermost secret of his power among his fellows. Ruskin defined wealth as power over men. Grant this, and William Osler was one of the wealthiest men of his day. He had the peculiar faculty of causing those about him to react favorably to him. The crowning honor of his life came when on July 12, 1919, the seventieth anniversary of his birth, his former students and

associates in Baltimore united in dedicating tributes of love and affection to their beloved "Chief." Few have been the men who in their lifetime have had showered on them such honors.

What was Osler's outstanding contribution to his generation? Others may differ as to the answer, but he himself believed that by far the most useful and important work he had been called on to do was the organization of the medical clinic at Johns Hopkins. In nothing did he take greater pride, and he desired no other epitaph than the statement that he taught medical students in the wards.

The opening of Johns Hopkins Hospital, May 7, 1889, marked an epoch in medical education in the United States. According to the will of the founder, the hospital was to be an integral part of the University Medical School. When the time came to appoint a physician-in-chief to organize the various departments, the university authorities sent Dr. Billings to interview Osler, who was in the chair of medicine in the University of Pennsylvania. The interview lasted only a few minutes; without taking a chair Billings asked: "Will you take charge of the medical department of Johns Hopkins Hospital?" Osler answered, "Yes," and the appointment was made.

This was the opportunity of his life to demonstrate to the profession of this country his notion of how doctors should be made. Amphitheater clinics, ward and dispensary classes, to his mind were makeshifts. His plan was to have the student live in the hospital, to take part in its work, and under trained instructors, to examine the patients, to follow disease from hour to hour, and finally to administer the proper treatment. These advantages he looked on as rightfully belonging to every medical student. A synopsis of this method is found in an address, "The Hospital as a College," delivered in 1903 before the New York Academy of Medicine. The method he advocated was not new. It was the old method of Boerhaave and of Rutherford modified and enlarged to meet the needs and the demands of the twentieth century. The methods then in vogue were largely intended to fit the student for the coming examinations rather than to make thinking practitioners. In Osler's words, "For the bread of wards they were given the stones of the lecture room and amphitheater."

The magnitude of this contribution to American medicine may better be comprehended by reading the words of appreciation of Osler and his work in connection with Johns Hopkins Hos-

pital uttered by one of his collaborators in that institution: "The opening of the hospital was for the trustees, the faculty, and above all for us expectant, impatient medical novices, the beginning of the fulfillment of our long-suppressed desires. For me the reality far surpassed the fantasy of my dreams. In the association that was to follow, which for my part was as close as I could make it, Osler as a physician, teacher and friend, constantly raised my preconceived ideal. Memories of this time overwhelm me!"

The ideals of his life were three in number: "To do the day's work well and not bother about tomorrow; to act on the golden rule toward his professional brethren and his patients, and to cultivate a measure of equanimity to enable him to bear success with humility, affection of friends without pride, and to be ready when the day of sorrow and grief came to meet it with courage befitting a man." Those who knew him best tell us that he realized them all, and that when in August, 1917, he lost his only son in battle, his manhood rose above his sorrow and grief and that, true to Plato's ideal perfection of which he had so often spoken, he "consumed his own smoke," and those about him were not annoyed by the dust and soot of his complaints. "Our's is a common sorrow," he said; "we must think of others as well as of ourselves."

William Osler's life is worthy of emulation by every son of Aesculapius. His contribution to the science and the art of medicine constitutes a rich heritage for our profession. His words of counsel touch every phase of life as it concerns both student and practitioner. The collection of his public addresses form a body of admonition and inspiration to which the physician may turn for comfort and hope in any of the exigencies that may befall him. No matter how nasty the treatment your competitor has accorded you, turn to Osler's sacred counsel and you will ward off the bitterness that otherwise might poison your soul. Sacred counsel indeed, for it emanates from a life of integrity. Read first "Aequinimitas," then turn to "The Master Word in Medicine," and when you have done you will have forgiven and forgotten the sting of it all in the determination to press on in your purpose of being a constructive rather than a destructive force in your community. I can not refrain from quoting from the latter address a few sentences which have been a wonderful help to many; besides, they furnish an example typical of his style as a public speaker:

"Though a little one, the master-word looms

large in meaning. It is the open sesame to every portal, the great equalizer in the world, the true philosopher's stone, which transmutes all the base metal of humanity into gold. The stupid man among you it will make bright, the bright man brilliant, and the brilliant student steady. With the magic word in your heart all things are possible, and without it all study is vanity and vexation. The miracles of life are with it; the blind see by touch, the deaf hear with their eyes, the dumb speak with their fingers. To the youth it brings hope, to the middle-aged confidence, to the aged repose. True balm of hurt minds, in its presence the heart of the sorrowful is lightened and consoled. It is directly responsible for all advances in medicine during the past twenty-five centuries. Laying hold on it Hippocrates made observation and science the warp and woof of our art. Galen so read its meaning that fifteen centuries stopped thinking, and slept until awakened by the *De Fabrica* of Vesalius which is the very incarnation of the master word. With its inspiration Harvey gave an impulse to a larger circulation than he wot of, an impulse which we feel today. Hunter sounded all its heights and depths, and stands out in our history as one of the great exemplars of its virtue. With it Virchow smote the rock, and the waters of progress gushed out; while in the hands of Pasteur it proved a very talisman to open to us a new heaven in medicine and a new earth in surgery. Not only has it been the touchstone of progress, but it is the measure of success in every-day life. Not a man before you but is beholden to it for his position here, while he who addresses you has that honor directly in consequence of having had it graven on his heart when he was as you are today. And the master-word is *Work*, a little one, as I have said, but fraught with momentous sequences if you can but write it on the tablets of your hearts, and bind it on your foreheads."

Sometime during November last he was called to Glasgow in consultation and on his return was caught in the railway strike at New Castle; and being anxious to get home motored the rest of the way to Oxford, arriving there ill with pneumonia. Later pleurisy with effusion developed resulting in necessity for thoracentesis. During the long illness that followed he occupied his time by writing letters to his many friends, or when he could no longer write, he had others do so in his stead. Almost the last act of his life, Christmas Day, he dictated a message of cheer to Johns Hopkins Hospital, telling of the good fight he was making. Three

days later, late in the afternoon of December 29, he died.

He was born at Bond Head, Ontario, July 12, 1849; died at Norham Gardens, Oxford, Dec. 29, 1919. Three score and ten years; from a helpless colonial infant to Regius Professor of Medicine at Oxford; are these the measure of his life? "Everyone who has ever been his student," says Dr. Thomas R. Brown, "is still studying with him peripatetically following in his footsteps as he journeys through life, always teaching some new lesson of medicine or of living. Every honor that has befallen him has enriched us and made us prouder of our brotherhood; every step upward or onward of his made our paths easier and the heights seemed not so far away. We have rejoiced in his happiness and in his honors, and perhaps he has been helped in his sorrows by the knowledge that they are ours as well, for he has shown us how work could be made play and how the real could be made ideal. Because of him our lives have been made better, our successes more real, our failures less hard to bear, for through the tangled skein that spells life, each of us knows that in him he has, and will always have, a teacher, a friend, and a true fellow student to the end of the chapter." These words were spoken on the seventieth anniversary of his birth while he was still living. They are not the expression of maudlin sentimentality, such as is so commonly provoked by the morbid atmosphere that pervades a funeral occasion, but a calm, unexaggerated statement of a sane man who had occasion to know William Osler as he was. Count me over the souls whose lives he touched by the power of his precept and example, and gather together their expressions of admiration and love; these are truer measures of his life than length of years and advancement of position.

The "Chief" has passed beyond our ken. As to the particular place where his soul abides, let theologians quibble. Their best answers are but guesses which do not interest us. He is gone. They tell us that he is dead, but

"Is he dead whose glorious mind
Lifts thine on high?
To live in hearts we leave behind
Is not to die."

He has gone to

". . . join the Choir Invisible
Of those immortal dead who live again
In minds made better by their presence
.
.
.
The Choir Invisible
Whose music is the gladness of the world."

THE PHYSICIAN

A GENTLEMAN OF CULTURE AND CHARACTER *

FRANK B. WYNN, M.D.

INDIANAPOLIS

Up to the middle of the century past, the term "Doc" in addressing the physician, was almost universally employed. It was of course consonant with the crude manners of pioneer days. At the present time the abbreviated title is considered offensive to good manners and the dignity of our calling. The transition from "Doc" to "Doctor," typifies the general educational and cultural advancement which has taken place. With this progress the physician has evolved into a correspondingly finer type; better in his professional equipment of course, but finer still in his cultural qualities and character.

Briefly, what are some of the things making for culture? With progress in education, the art of discrimination becomes cultivated. One person devotes his attention to the nature, production and interpretation of sound; he studies its relation to that harmony which charms the human ear. He becomes a musician, experiencing the reactions of joy in his own nature and passes the thrill on to others. Another individual with seeing eyes observes perspective, proportion and harmony of colorful effects, catches the spirit of idealism and beauty, which he seeks with his brush to preserve and impart to others. He is a painter. A third, observing the world in its fulness, animate and inanimate, looks through the material into the realm of spiritual suggestiveness. His whole being is aroused by what he sees and feels, and he seeks to portray the largeness of his vision, the beauty and truth of the revelation made, in adequate and expressive human speech. We call him an author, or poet.

These are some of the avenues to artistic culture. Out of a broad education is born that fine discriminating sense, which measures values aright; which divines the appropriateness in life relations and establishes a harmonious and beautiful order. In fine it prepares the soil for the growth of the choicest flowers of civilization.

In arguing for a larger cultural development of the physician I am not urging that physicians should become artists, musicians or poets; nor again experts in the realm of general or technical science other than that of their calling; or

authorities on any of the topics of higher education comprehended under the term humanities. It is the duty, however, of medical men hoping for the finer advancement of the profession, to absorb all possible light from these illuminating sources. If not an intimate knowledge, let there at least be an acquaintance with topics of this nature.

Just now the popular educational slogan is vocational education. "Train a child for the job he is to pursue in life," is the cry of the enthusiast—"to cook, sew, mold iron, lay brick, or plan buildings." Danger lurks in this tendency to get away from the humanities. In colleges the same trend is apparent, in the appeal for *productive scholarship*. Let us admit that the theory as applied to medicine will make better technicians. On the other hand, it should not be forgotten that it will also make for the influences of materialism. The things of the spirit, the beauty and ennobling effect of culture and refinement in the higher sense, will be lost to view. In our eagerness to know structure and function, normal and disturbed, of the body parts, let us not forget the man as a whole; an aspiring, feeling, beauty-loving creature, with qualities which distinguish him, as vastly superior to lower animals.

By thus broadening the culture in our ranks there will arise now and then beacon lights among our number who will shed light on the world's highway, glorifying the profession we love and bringing nearer the ideals we cherish.

Not a few physicians in the past have answered to the highest claims of artistic achievement. Oliver Goldsmith, Oliver Wendell Holmes and S. Wier Mitchell are familiar examples in literature. Billroth, the great surgeon, was also a noted flutist. He was an intimate friend of the great composer, Wagner, whom he always entertained when he came to Vienna. Forchheimer, author of the modern classic on therapeutics, was so accomplished a violinist that he feared it might eclipse his reputation as a physician. Osler, the clinician and medical writer, was almost equally distinguished as an essayist on general scientific and cultural subjects.

It should be a matter for felicitation that physicians often exhibit a fine cultural taste. Every community has men of this type. Such acknowledge first obedience to the vocation of healing the sick. At the same time they find in the by-paths pointed out above, not merely needed amusement and recreation, but they become large contributors to community betterment.

* Second of a series of articles by Dr. Wynn which will appear regularly in THE JOURNAL.

By way of contrast to what is here stated, there is always present among us the practitioner who eschews these finer things outside the pale of medicine. He prides himself on sticking strictly to business. He frowns with severity on any departure from the narrow professional path. He does not see, in fact he does not want to see the flowers by the wayside. He is not interested in attending a lecture on literature, art or philosophy; nor would he gain pleasure in hearing a great actor interpret Shakespeare, or listening to a great orchestral concert. In truth he rather boasts his ignorance concerning these matters and with an air of conceit asserts that he has no time for them. Such an individual lays himself open to the suspicion of an underlying selfishness, a striving after the tradesman's goal of business and professional aggrandizement. Such a person is much given to prating about his cases and cures. He regales his lay-auditors with harrowing tales of professional experience—an ill-mannered form of self-laudation and personal advertisement.

What now, are some of the lesser lights of culture which it is the duty of the physician to keep burning? Not the least of these is *good manners*. First of all this requires adaptability. The very nature of our work gains us *entre* to every kind of household; to the presence of the pure and saintly as well as to the debased and degenerate; to stately mansions, modest cottages and foul smelling hovels. Let the younger physician learn early and never forget, that wherever duty leads, there should go also good manners. He will not always find culture behind the door with a brass knocker; and on the other hand he may encounter at the bedside of the poor man who is down and out, an exquisite sense of refinement. Whatever the moral or social status of the patient, the true physician will never be aught but a gentleman in all the finer meaning of the term. Good manners of course comprehends the conventional laws of politeness. It requires cleanliness of person, no less than cleanness of speech. At the table it implies not merely that one should eat pie with a fork, avoid drinking tea from a saucer, or the unseemly gulping of food; it requires also that a delicate attitude of courteousness toward others be maintained; likewise there should be the creation of an appetizing mental aroma of wit, banter and anecdote. On the street the formalities of greeting should be observed, showing deference to women and tender consideration of the aged.

Erroneously some are prone to look on

politeness as a remnant of bigotry and aristocracy, handed down from feudal days. As a matter of fact it is quite the opposite. Every act of politeness is a little sacrifice or free-will offering for the comfort and enjoyment of some one else. Its very essence is democracy—a kindly and brotherly interest in one's fellows. The physician who cultivates this art will find it the key which most frequently unlocks the door to that professional and confidential intimacy so essential in getting at the truth in disease history. It will command, too, that respect and faith so important in the management of a case. How often is one's patience tried by the tedious narrative by the patient, of irrelevant matters. To stem the current of conversation and turn it into proper channels without giving offense is a consummate art in which many physicians become very adept. Shocking revelations potential for the patient's ruin, embarrassing domestic situations and business secrets of tremendous importance are poured into his ears. Good manners and character will forever seal them there.

A severe test of a doctor's good manners and character will come when he falls heir to the case of a discharged, rival practitioner. He is regaled with the shortcomings of his predecessor—alleged carelessness, blundering and ignorance. It is so easy to fall in with the abusive tirade against a professional rival. How important at such times to maintain a discreet position. Play square toward your brother practitioner. It is entirely reasonable to assume that the story of the patient and relatives is prejudiced and overdrawn. Even granting some minor dereliction in a colleague, does it not become one's bounden duty as a gentleman, to exonerate his fellow practitioner from minor lapses? Should we not more frequently make plain the nerve-wracking stress of our labor—the loss of sleep, the harassment of critical cases, irregular hours and saddening deaths—and crave pardon for minor offenses? We are just human; why should perfection be expected? What gift of culture, what fine spirit of fairness is that in a physician who can persuade a dissatisfied family to return to their former medical attendant! This presupposes that the discharged colleague is an honorable man. If on the contrary he has been guilty of gross and inexcusable dereliction, perhaps moral obliquity, then duty points another way.

Modern law acknowledges its greatest debt to Moses, as do humanitarian ideals of the age their obligation to the Man of Gallilee. In a

sense their analogue is found in Hippocrates, from whom has descended the altruistic conceptions of medicine. From time immemorial there have always been those among us who have held aloft these ideals. Likewise there are those of materialistic trend who would degrade the profession to the level of a trade. They reason thus: "Medicine is merely a means of livelihood. Therefore, make all you can and lay aside for a rainy day and old age. Why worry about one's brother? Let the fit survive; the others are not worth saving. Man is a physical creature; an animal to be dealt with by the same laws as other animals."

Another, answering to the creed of Hippocrates, sees in a man a being who is the climax of creative order—a temple not made with hands, tenanted by an effulgent mind and an imperishable soul. Possessed of this spirit, he looks on the human body with awesome reverence, and acknowledges the Father of All. This conception gives him an exalted idea of the duties and responsibilities of the physician.

Another not uncommon type constitutes a composite of the two preceding. He manifests blunt and obstinate irreverence toward religious matters—an attitude, I believe, often belied by his convictions which he denies utterance. Familiar are his vulgar and ill-mannered oaths, and his keen satire on religious pretenders. He goes to great pains to impress the public that he is not religious, and yet his relations to many things moral and spiritual, exemplify Christian ideals. The thin veil of bluff which he wears does not hide from the discerning mind the real man behind it. I have heard him refer in derisive terms to those of devout habits; and again I have seen him forsake a lucrative business to spend hours in a public hospital, laboring with sick and deformed children, bantering and frolicking with the little waifs and getting so close to their hearts that they would hail his approach with exclamations of delight. He is short on good religious manners, but long on the essentials of true religion. Another I have heard prate about his inability to get a drink at pleasure, heaping maledictions on the advocates of temperance. Then again I have seen him giving the most painstaking care to the degraded victims of the drink habit and kindred vices, even supplying them from his own purse with money for proper food and medicine.

When I see these irreligious pretenders in their ministrations of mercy and cheer, I say to myself what I would not dare assert to them openly: "My dear colleagues, you will not admit it but in my opinion you are more genuinely

religious than many a fellow who parades his church connections. You are so imbued with the scriptural injunction, not to let the right hand know the deeds of the left, that you cover your good acts with a mask. Honestly, you would be handsomer and finer physicians without it. Don't deceive yourselves. We know the real man behind the mask. Or to use a different figure of speech, you are diamonds in the rough which would be given a greater brilliancy by a setting of religious culture."

(To be continued)

THE MECHANICAL AIDS IN DIAGNOSIS OF LESIONS OF THE UPPER URINARY TRACT

J. S. EISENSTAEDT, S.B., M.D., F.A.C.S.

Associate Genito-Urinary Surgeon, Michael Reese Hospital
CHICAGO

Numerous reports have recently appeared devoted to the description of the various procedures which I wish to discuss. In spite of this fact I hope to bring out some new points and to emphasize some important old ones. The following mechanical aids have actually revolutionized methods of the diagnosis of lesions of the genito-urinary tract.

1. Cystoscopic examination.
2. Ureteral catheterization.
3. Roentgen-ray examination.
4. Combination of two or all of the above plus the injection of a fluid or passage of an instrument which appears opaque in the roentgen-ray plate.
 - (a) Shadowgraph catheters, impregnated with lead or bismuth.
 - (b) Placing of metal mandrin in catheter.
 - (c) Pyelography—using either 40 per cent. argyrol, 10 per cent. collargol or thorium.
 - (d) Uretography.
 - (e) The use of a metal ureteral catheter with resonator attachment for eliciting the presence of stones.
5. Chromocystoscopy.

It is not my intention to underrate the value of a painstaking history and carefully made physical examination, for without attention to these, no one, regardless how remarkable his technical skill may be, can justly lay claim to the title of surgeon. The clinical evidence and the deductions made possible by our mechanical aids must each be carefully weighed before a

conclusion can be reached in a complicated case. Why then lay stress on the mechanical aids? Stone in the kidney may be latent or the symptoms may be referred to the opposite side, or may pass under the guise of lesions of the gastro-intestinal tract or of the genital tract in women, or under the diagnosis of sciatica or lumbago or cholecystitis, and not infrequently may be marked by severe reflex ileus, associated with vomiting and meteorism.

Pyelitis is likewise frequently diagnosed falsely on account of symptoms referable to other anatomic structures; cases have been reported by Lindeman, Schlesinger, Cohn and Reiter, in which the diagnosis of neuralgia in the iliac or ischial regions was made, and only later were the symptoms found to be due to inflammation of the renal pelvis. Vanderhoef reports a series of cases of pyelitis in which the clinical course and temperature curve were identical with malaria. Mirabeau has shown that pyelitis may produce symptoms in the female referable exclusively to the genital tract. Langstein reports a case of pyelitis under the guise of a severe meningitis, and Schmidt calls attention to pain in the ileocecal region in these cases.

Pyonephrosis, hydronephrosis and tumor have equally the same eccentricities, in many cases making them difficult of diagnosis.

The following case is instructive in this connection:

The patient, a well nourished woman, complained that she had suffered for several months with pain and fullness in the right renal region. The pains were colicky in type, but never occasioned prostration. The urinary symptoms were not marked nor characteristic. Some pus was found in a catheterized specimen from the bladder. A distinct tumefaction was noted in the right flank, which was absolutely characteristic in location, size, contour and consistency for kidney. A competent and painstaking internist, after careful physical examination, diagnosed a lesion of the right kidney, probably hydronephrosis. The patient came to operation, the kidney was exposed and found to be normal. The case proved to be an enormous hydrops of the gall-bladder.

How could such an error have been avoided? A cystoscopic examination had been made and the bladder reported as normal. The diagnosis could have been made had all the procedures indicated, been carried out in their proper sequence plus the simple inflation of the colon, which would, in the greatest probability, have shown definitely that there was not a retro-

peritoneal lesion of the upper urinary tract. A carefully taken history, and urinalysis of a twenty-four-hour specimen, including bacteriologic examination and a roentgen-ray examination of the entire upper tract, including both kidneys, the entire length of both ureters and the bladder should have been demanded.

The various procedures mentioned demonstrate the following points in the diagnosis of upper urinary tract lesions.

1. Cystoscopy: With an absolutely normal bladder, lesions of the upper urinary tract of long standing are not common. One may, however, encounter a normal bladder picture, in the presence of a simple hydronephrosis, a closed off pyelonephritis, or a low grade pyelitis, stone in the renal pelvis or tumor of the kidney. Therefore, when negative, this must be followed by other procedures when lesions of the upper tract are suspected. In a positive sense cystoscopy is usually very important. For example, a tuberculous ulcer will point to tuberculosis of the kidney almost with unerring exactness. A distinctly swollen, edematous, congested or gaping ureteral orifice will lead to the diagnosis of a lesion of the corresponding kidney. And a diagnosis of a surgical kidney is readily made if a plug of pus is seen coming from one or the other ureteral orifice. Blood seen coming from one orifice will lead usually to the diagnosis of renal tumor or stone, while a complete absence of urinary flow from one side, especially if indigo-carmin has been previously injected, will diagnose an obstruction usually due to stone or stricture. A ureteral stone engaged in the orifice is likewise readily noted.

2. Ureteral catheterization is of great value in determining from which side pus or blood originates. By its use one can also detect the presence of a hydronephrosis by watching the urine drop from the distal end, for instead of the normal rhythmical dripping, a sudden continuous stream is noted. Obstruction of the ureter due to stone or stricture are likewise usually detected with ease. However, in a somewhat dilated ureter a stone may offer no obstruction to the passage of the catheter. For bacteriologic examinations ureteral catheterization is absolutely indispensable.

3. The roentgen ray is likewise of enormous value in confirming our clinical diagnosis as well as revealing conditions which might readily have passed unnoticed. It will show about 98 per cent. of all renal calculi, or practically all except the rare uric acid type. When the urine is alkaline in reaction, the absence of shadow on the roentgen plate, excludes a calculus of

any composition. In the presence of an alkaline reaction it is certain that phosphates will have been deposited on a uric acid calculus making it opaque to the roentgen ray. Often renal stones are latent, for only in 50 per cent. of cases does the typical renal colic occur, while pain without colic is present in 30 per cent. of cases, leaving about 20 per cent. without pain which is at all suggestive. I have remarked above that the pain may be referred to the opposite side; therefore, making it essential to examine the entire upper tract on both sides. Ninety per cent. of ureteral stones show in the roentgen plate. The numerous extra-ureteral shadows are due to phleboliths, calcified lymph glands and concretions in the intestinal tract. The differential diagnosis of these I shall presently take up under discussion of uretography and the use of the shadowgraph and metal ureteral catheter. The roentgen ray is particularly of value when repeatedly used to observe the descent of the stone in the ureter after intervals of two or three days. A dystopic kidney in a clear plate is often diagnosed by this method of examination, while various other anomalies are not infrequently detected, as for example horse-shoe kidney, and both kidneys present on the right or left side. Enlargement of the normal kidney shadow may help in diagnosing renal tumor or tuberculosis, particularly if calcified areas in the latter show up plainly. The diagnosis of hydronephrosis and pyelonephrosis is likewise facilitated by abnormalities seen in the roentgen-ray plate.

I shall discuss together, for brevity's sake, pyelography, uretography, the use of mandrin in catheter and of metal catheters. These procedures when carried out carefully and with the skill which is not acquired with too great difficulty, are perfectly safe and capable of bringing to us a great deal of valuable information. The chief value of filling the renal pelvis and ureter is to determine whether the respective structures are normal in shape, position, size and number; and whether or not a suspected shadow lies within the lumen of the ureter or within the cavity of the pelvis. A satisfactory pyelogram will definitely show that certain shadows cannot be renal or ureteral stones, because they lie at too great a distance from these parts. They will also show distortion of the pelvic outline, due either to inflammatory processes, stone or tuberculosis, showing a jagged, irregular contour, or dilatations due to back pressure from obstruction below, in this instance the outline, though distorted, is smooth and rounded. Gallstones may closely simulate renal stone in symp-

tomatology. The shadows may appear absolutely similar in the roentgen-ray plate; pyelography, however, will enable us to show that the shadows cast by galls-tones lie at a considerable distance from the pelvis of the kidney. Ordahl's technic for intensifying the shadow cast by a stone, either in the pelvis or ureter is a helpful one. The intensification of the shadow depends on the deposit of a silver solution, usually 20 per cent. collargol, on the surface of the stone, thus making it denser to the passage of the roentgen ray.

When a hydronephrotic or pyelonephrotic pelvis is filled with collargol the roentgen-ray plate should demonstrate besides the increase in size and dislocation usually either laterally or caudally, the origin of the condition, i. e., whether due to malformation of the ureter—to bends, twists or turns, or partial obliteration or constriction, or due to abnormal insertions of ureter into pelvis. Stereoscopic plates still further enhance the value of roentgenograms in general, whether made with or without the use of the various substances or instruments introduced. The shadowgraph catheter when placed into the ureter will likewise determine whether or not the suspected shadow lies within or without the ureteral lumen; however, in certain instances, for example, in dilated ureters with stone it does not seem to be as useful as uretography. A mandrin introduced into a ureteral catheter has no advantage, in my opinion, over the excellent shadowgraph catheters now obtainable. The use of a metal ureteral catheter is particularly indicated when the facilities for roentgen examination are not available. When used with resonator attachment one can detect a metallic click when the proximal tip comes in contact with concretions within the ureteral lumen.

SUMMARY

1. We have at our disposal various methods of exact diagnosis of lesions of the upper urinary tract.
2. The fields of their usefulness overlap and each procedure may be made to supplement the other.
3. The use of these mechanical aids does not and should not do away with careful clinical and laboratory methods.
4. Urinalysis and roentgen-ray examination at least should be made routine procedures when even the slightest suspicion points toward urinary tract lesions. Often wholly unexpected facts are revealed.
5. The necessity for the use of these pro-

cedures lies in the fact that many serious lesions of the upper urinary tract may pass under the mask of other pathologic conditions and cause symptoms referable to remote or widely differentiated structures.

25 E. Washington Street, Chicago.

DARNING NEEDLE IN THE LUNG

CASE REPORT

J. N. STUDY, M.D.
CAMBRIDGE CITY, IND.

The following case may not present all the thrills that go with a serious abdominal operation, but perhaps presents some features sufficiently interesting at least to place it as an unusual case:

About midnight of June 10, 1919, I was asked to see a little girl, S. W., aged 2 years. The child had aroused the entire family from their sleep with her intense screaming, and it required some little time to even give a guess as to what was causing the pain and crying. The child was taken from her crib and by her side was found a round ball needle cushion which perhaps the child unnoticed carried with her to bed. Placing the child on a table under a strong electric light, and her clothing removed, her screaming intense, at each inspiration and expiration could be seen in the left side of the thorax at the seventh intercostal space, 1 inch posterior to middle axillary line, two small wheal-like elevations of skin about three-fourths of an inch apart. One of these small elevations would disappear and reappear at the other point at each intense inspiratory and expiratory act. Occurring at such a time of night, the intense screaming from pain, and 18 miles from hospital and roentgen-ray apparatus, prompted the writer to attempt an incision over one of these wheal-like elevations of skin. A neighboring physician was called, who gave ether as an anesthetic, and a young student assisted me. The incision was made over the most suspicious looking elevation which under the anesthetic became less noticeable. After cutting down through the skin and intercostal muscle the gentle use of a probe failed to discover any abnormal substance, and the incision was now extended to where the other elevation under exaggerated breathing had occurred. Along this line the gentle use of the probe discovered only some suspicious looking and firm feeling tissue from which with a strong Pean artery forceps I succeeded in extracting a darning needle 3.75 inches long, the eye of which still contained a colored thread as ordinarily used in darning clothing. This needle had entered the inter-

costal space, passing directly transversely into the lung. The thread measured one-half inch in length and with the needle was completely concealed.

Anyone who has ever attempted the use of a round needle in necropsy work appreciates the difficulty in passing such a needle through the skin. How a little child could, in its bed, pass such a sized needle between the ribs and completely through the intercostal muscle and into the lung tissue, concealing both needle and thread, seems very unusual.

The child made a good recovery with very little indisposition.

FRACTURE OF THE CALCANEUS

E. B. MUMFORD, M.D.

Visiting Orthopedic Surgeon and Chief of Fracture Service,
City Hospital, Indianapolis, Ind.; Assistant in Surgery,
Indiana University School of Medicine

INDIANAPOLIS

Fracture of the calcaneus (*os calcis*) is not uncommon. Its frequency depends on the thoroughness of the examination and the use of the roentgen ray in all doubtful cases. Many injuries, the result of falls on the heel, have been diagnosed as sprains when the roentgen ray would have disclosed a fracture of the calcaneus.

The importance of recognizing this type of fracture and of giving the proper treatment is best emphasized by the data of Cotton of Boston. In twenty-two cases of a series of eighty-four in which he could obtain a late history, 50 per cent. had some permanent disability which was serious though not always enough to prevent work. In fourteen cases, eight weeks to two years duration, none were fit to work. In fifty-five cases the results were bad in all cases which had no treatment or in which the treatment consisted only of the application of a plaster cast. In those in which the attempt at reduction were made, the results were better to excellent. There is perhaps no fracture in the skeleton in which the permanent disability may be so great as in that of the calcaneus.

The bad end results in this type of fracture may be attributed to four factors: (1) Failure to recognize the fracture leading to a diagnosis of sprain; (2) lack of understanding of the rôle of the calcaneus in the mechanics of weight-bearing; (3) ignorance of the exact displacement of the fragments; (4) improper treatment in reduction.

The failure to recognize this fracture is due to carelessness in the examination and to lack

of appreciation of the frequency with which the fracture occurs. All cases diagnosed as sprains which do not respond to the treatment for that condition should be considered as potential fractures of the calcaneus until proven otherwise by the roentgen ray.



Fig. 1-A.

Anatomically, there are two very important points to be remembered in regard to the calcaneus. The inferior or plantar surface "is uneven, wider behind than in front and *convex* from side to side" (Gray). Thus the calcaneus, although a part of the foundation which bears the weight of the entire body, has its bearing surface rounded or convex. As long as the line of weight-bearing is in the center of the bone its relation to the rest of the foot remains normal but should this line be shifted to either side, there is a rotation of the base of the bone towards the opposite side.

This action is the same as one sees when a squirrel makes its cage revolve by climbing up one side, the cage rotating in the opposite direction. The tendo calcaneus (tendo Achilles) very frequently is attached slightly to the outer side of the midline of the calcaneus and through its powerful action tends to rotate the calcaneus outward. In all valgus feet, which condition exists in practically all adults, the calcaneus is rotated outward through the shortening of the tendo calcaneus.

The types of fractures which occur in the calcaneus are varied but in all of them the posterior fragment, which includes a greater part of the weight-bearing inferior surface, is loosened and is rotated outward and pulled upward through the action of the gastrocnemius muscle. This upward thrust is accentuated

when the fracture is caused by a fall from any height on the calcaneus. As a rule, only a lateral roentgen-ray view is made of the foot, and though this may show the upward displacement it does not disclose the more important lateral displacement and the outward rotation of the posterior fragment. To show this, a posterior view must be made. This is difficult at all times and often impossible as the patient cannot give enough dorsal flexion of the foot at the ankle joint to bring out the calcaneus.

With this conception of the anatomic and pathologic condition it is easy to understand the clinical findings in most of the recent cases and to foresee those which will come in the late untreated or poorly treated cases. In the early cases besides the pain of weight-bearing there is tenderness over the entire heel and especially beneath the external malleolus. In the chronic or late cases, there are two diagnostic points—pain and swelling beneath the external malleolus and pain along the inner border of the foot or the longitudinal arch. The former is due to the callus about the displaced fragments extending towards or up to the external malleolus. This callus is crowded against



Fig. 1-B.

Figs. 1-A and 1-B.—Fracture of calcaneus before operation.

the external malleolus at each step by the valgus position occasioned by the outward rotation of the calcaneus and the shortening of the tendo calcaneus. The pain on the inner side is that which characterizes any valgus foot and the factors involved are the same.

All efforts in the reduction of the fracture must be directed towards correction of the outward rotation of the calcaneus and its upward displacement and towards the correction of the valgus position of the foot. As a rule, it will be impossible to do this with the application of a simple cast without any other force than through simple hand manipulation to hold the fragments in position while the cast is hardening. The end results of this treatment have been notoriously bad. Several operative methods have been devised but that of Cotton and Wilson seems the most logical and easiest of application.

A heavy, solid, steel sound is passed in front of the tendo calcaneus so as to rest on the top

of-Paris cast for two weeks. At the end of that time the cast is removed and active motion, massage and hot soaking begun. At the end of the third week some weight-bearing may be allowed. It is most important that the inverted position of the foot should be maintained for at least three months by having a lift three-eighths of an inch high on the inner side of the heel and sole of the shoe and at no time should the patient be allowed to place his foot on the floor without the shoe. Unless this essential point in the after-treatment is carefully observed, a valgus position may be produced and the pain typical of a fractured calcaneus lead to a crippling of the patient.

The following case is reported in which the above method was used. The roentgen-ray photographs demonstrate the position of the fragments before and after operation. The outline of the fracture has been retouched in order to make it more distinct.

CASE REPORT

J. M. W., 55 years old, white, janitor, Nov. 20, 1916, fell a distance of about 11 feet, striking a tile floor. Was able to walk with some difficulty and had but little pain and tenderness. No deformity. Diagnosis of sprain. The next morning there was considerable ecchymosis about the external malleolus of right leg. Roentgen ray was made and showed transverse fracture of the calcaneus.

Operation the following day. A steel sound was run between the tendo Achilles and the tibia as close to the calcaneus as possible. With counter traction made by a steel rod under the arch of the foot traction was made on the sound, pulling the calcaneus downward and inward, and rotating its base inward. The tendo-Achilles was then cut and the foot put up in plaster in a cavus position with a pad under the longitudinal arch. Plaster removed at end of four weeks followed by passive and active movements and hot applications. The patient returned to full-time work on Jan. 15, 1917, having had fifty-four days' disability.

408 Hume-Mansur Building.



Fig. 2.—Fracture of calcaneus after operation.

of the calcaneus. The tendo calcaneus is divided with the tenotomy. With an assistant giving counter pull through a steel bar passed under the middle of the longitudinal arch, the operator is able, through the pull on the steel sound, to pull the posterior fragment of the calcaneus downward and to rotate the base of the bone inward. Inasmuch as the action of the gastrocnemius has been taken away, through the tenotomy of the tendocalcaneus, there is no tendency for displacement of the fragment after it has been once replaced in its proper position. The foot should be placed in a position of marked cavus, with considerable inversion and with dorsal flexion to a right angle or even more. This position is maintained by a plaster-

ACCORDING to a press report from Italy, 350 doctors and an equal number of midwives are on a strike in Milan and throughout that province. Also, a report from Spain states that at a meeting held for the purpose of forming a union, physicians and surgeons of Madrid adopted a resolution expressing determination to refuse to serve in hospitals unless persons of good position were forbidden to take advantage of free consultations, as is now frequent.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

JUNE 15, 1920

EDITORIALS

**SOCIALIZING THE MEDICAL
PROFESSION**

It has been asserted by numerous writers, who seem to have investigated the subject, that the average income of doctors, all classes considered, is about \$750 a year. In all probability this estimate is too low at the present time when most doctors are charging more for their services than they did a few years ago. However, at best the average doctor does not earn as much as the ordinary craftsman, and, in fact, the common unskilled laborer, if he works regularly, earns more than the average doctor. If we take into consideration the fact that it requires about sixteen years of schooling after leaving the grammar grades, and an expense of about \$20,000 to fit a man to be a reasonably well trained physician, capable of filling a government or hospital staff position, we are led to believe, from average incomes of doctors, that education and training count but little when reckoned by a standard of dollars and cents. In one sense the doctor is to blame for his inability to earn more, for he fails to charge adequate fees for his services. He tolerates the rankest kind of imposition on the part of individuals and organizations that secure gratuitous services from him on false pleas of charity or a sentimentality that is not deserving of recognition in a matter which should be based on a business as well as a professional basis, and he shrouds himself in a cloak of ethics which does not permit him to protect himself against legislative exactions or restrictions which are economically ruinous to his profession.

For many years there has been a gradually increasing tendency to socialize the medical profession, and just at the present time this effort is greater than ever before. Doctors have competition on every hand. The latest competitive feature is the institution of venereal clinics, and both the federal and state governments are carrying on an educational campaign consisting of lectures and the issuing of bulletins which tell the public the nature, cause, and methods of

treatment of nearly all diseases. Aside from this there are the many church organizations, lodges, and industrial concerns that are furnishing gratuitous medical and surgical services as an act of charity or as a part of the perquisites which go with membership or employment in such organizations. In other words, competition unrestricted is having the tendency to make the practice of medicine, from the economic standpoint, unproductive. In no other vocation is ruinous and unjust competition tolerated with such complacency as we find among medical men who are gradually being legislated or economically "railroaded" out of business.

Our system of charity, and our plan of operating benevolent institutions of every kind, should be changed. Theoretically they are right but practically they are entirely wrong, for they have a tendency to breed pauperism, and are destroyers of character. Millions of dollars are taken out of the pockets of the medical profession for honest services rendered, and all for the purpose of furnishing charity to a class of people who are amply able to pay something, or if deserving should be made to pay something through the enforcing of a just wage system by employers of labor. While it is true that mechanics and laborers are shamefully wasteful and improvident, yet it also is true that in many cases they are not paid enough so that they have a margin for securing competent medical services after other necessities have been met. To offset the inadequate wage, various corporations, insurance companies, and medical partnerships are trying to furnish medical and surgical services gratuitously, or at a minimum expense, though such socialistic tendencies are at the expense of the medical profession as a whole. Compulsory health insurance or sick benefits are along the same line, and really are fundamentally wrong in that they are a species of paternalism which breed idleness, and a dissatisfaction and unrest among the working class, and works economic disaster for the medical profession to say nothing of destroying professional initiative.

We are unalterably opposed to any socialistic or paternalistic form of government, and we believe that it is inimical to the best interests of the nation and to the people as individuals. There have been many injustices in connection with the wage system as applied to both the skilled and unskilled labor, but conditions are better now than they have ever been before, and for the reason that it is beginning to dawn on the people that laborers and employers of labor must get together and share in the profits ac-

cruing from such union. In this consideration of economic justice the professions must not be left out, nor be made the football to be tossed about by labor or employers of labor, or subjected to unjust exactions and restrictions by legislation. If unfair competition is to be legally prevented in the trade and labor world, then it should be prevented in the work of the professions; and if labor is to be guaranteed a just remuneration, and capital is to be guaranteed a just return from investment, then the professional man is deserving of equal protection. In fact, as medical and surgical attention is one of the necessities of life, people in every walk of life should be guaranteed a sufficient return from labor to enable them to pay for medical and surgical services as one of the necessities. On the other hand, if the government or the state is to furnish medical and surgical services, and in that way legislate the individual physician out of existence, then let us be fair and continue the paternalistic and socialistic feature further and apply it to the furnishing of all necessities, including food, clothes, and even luxuries. In other words, if the medical profession is to be socialized, then let us socialize every other vocation, and if we are not going to adopt socialism as a general order for the country, then let the medical profession exist as an enterprising beneficial profession, unhampered by unjust competition and restricted only by those laws that make for the square deal.

The present tendency to turn the medical profession into a governmental or benevolent aid society, with the individual members drawing less than a good living wage, is worthy of the serious consideration of the individual members of the medical profession, and we respectfully urge that more attention be paid to those questions which have to do with self-preservation. There must be a closer union of medical men, and a recognition of the necessity for pulling together in matters that pertain to the economic as well as the professional standing of the profession.

IMPROVEMENT IN HOSPITAL SERVICE

BY THE COUNCIL ON MEDICAL EDUCATION AND HOSPITALS, AMERICAN MEDICAL ASSOCIATION

Every state medical association in the United States has its part in the present universal movement for the betterment of hospital service. Every association now has its own committee which is studying the hospital situation in its state in cooperation with the Council on

Medical Education of the American Medical Association. The Council has obtained, through reports, correspondence, and other methods, data relative to all hospitals in the country and each state committee has been supplied with the data relating to the institutions in its state. Through their closer familiarity with the hospitals, or by inspections the state committee is in excellent position to verify these data and to make a reliable report to their state association and to the Council.

For convenience and in order to secure uniformity of reports from the forty-eight committees regarding the relative efficiency of hospitals, blanks furnished by the Council call for a rating of all hospitals in Classes A, B and C, grouped also according to the special class of patients cared for. This rating is not for publication but will aid the Council in the preparation of a list of hospitals which are considered worthy of approval. These lists are subject to frequent revision so that names of other hospitals can be included as soon as sufficient improvements are made to warrant their being approved. State committees are urged to promptly report to the Council any instances where such improvements have been made.

The purpose of the work is to aid the hospitals in providing for their patients the best possible service and in no way to injure those which are honestly endeavoring to provide such service. Toward this end, every possible assistance will be given to individual hospitals by the Council or by the local state committee in establishing such changes as will make them worthy of approval.

Forty-two state committees have reported progress in connection with the latest survey and and thirty-four have turned in reports regarding hospitals inspected and graded, which have more than half the entire bed capacity of all general hospitals in the country. Meanwhile, this work of the Council is not conflicting with, or duplicating the splendid work being done by the American College of Surgeons, the Catholic Hospital Association, the American Hospital Association or other agencies. In fact, the work of each agency is evidently complementing that of the others.

At the New Orleans meeting, recently, the House of Delegates of the American Medical Association registered an intense interest in the improvement of hospital service and authorized the trustees to generously provide for that work. This work has been so intimately related to that of the Council on Medical Education that the name of this Council was changed

to the "Council on Medical Education and Hospitals."

In brief, further enlargement of hospital work by the American Medical Association is assured and in this work each state is destined to have an important part. Toward this end each association is urged to make its hospital committee permanent and to retain on it those who will not only be active but who also can do the work in the most efficient and unbiased manner. Hospitals, at present, form the closest link between the medical profession and the public and the medical profession should do all it can to aid the hospitals to provide the very best service possible.

LAY ANESTHETISTS

Among the various subjects discussed at the New Orleans Session of the American Association of Anesthetists was the one pertaining to lay anesthetists. The Association went on record by the adoption of the following resolutions:

WHEREAS, The American Association of Anesthetists is committed to the advancement of the science and art of anesthesia in all that relates to the welfare of humanity, through the medical and dental professions; and

WHEREAS, The advances in medical science are making it increasingly clear that the administration of anesthetics is a factor of practically equal importance with diagnosis, treatment, and operation; and

WHEREAS, There is an increasing disposition on the part of a few surgeons and hospitals to commit the administration of anesthetics to nurses, office assistants, and others without adequate qualifications, exploiting such services to their commercial advantage, according to testimony adduced before this Association, thus jeopardizing the health and welfare of patients, and increasing the death rate in operations; and

WHEREAS, Anesthesia is in a state of evolution, and those who advocate lay anesthesia would defeat any further progress in this branch of medicine; therefore be it

Resolved, That the American Association of Anesthetists places itself on record as unalterably opposed to the employment of lay anesthetists, nurse anesthetists, and all other types of anesthetists who shall not have been graduated from recognized medical or dental colleges, and have been licensed to practice medicine or dentistry; be it further

Resolved, That the American Association of Anesthetists will inaugurate and prosecute legislation to protect the medical and dental profession and the public from such inadequately educated and trained anesthetists whenever such action is necessary.

There can be no doubt about the propriety, and even the necessity of employing well trained and experienced anesthetists whenever

possible to obtain them, but the difficulty encountered in a very large number of incidences where an anesthetic becomes necessary is that a trained anesthetist is not at hand. This is particularly true in the small towns and in the country, and may be true with emergency work in the cities. No doubt every operator prefers to have a well trained anesthetist, and he would prefer a nurse who has been well trained in anesthetic work to the average medical man who thinks he knows something about giving anesthetics but is woefully ignorant and who will attempt to give general anesthetics, either with the hope of obtaining a fee or to please patients who have unlimited confidence in the family physician and do not recognize the fact that he is not competent to do everything pertaining to the practice of medicine and surgery.

We are under the impression that some surgeons and even some hospitals are using lay anesthetists as an economical measure, and while it is perfectly true that some nurses become reasonably expert in giving anesthetics yet the fact remains that there are times during the giving of an anesthetic when such knowledge as is possessed by one who has been medically trained is absolutely essential for the safety of the patient. If complications occur which require the prompt and decisive action of a medically trained anesthetist, they also will occur in the experiences of lay anesthetists, and if you can train a lay person to be a reasonably good anesthetist how infinitely better will a medically trained person be if trained as an anesthetist.

We quite approve of the resolutions that have been passed by the American Association of Anesthetists, and we believe that in the interest of better surgery and for the better protection of the patient we need and should have well trained medical anesthetists, and more of them than are available at the present time. There is absolutely no excuse for the employment of any other kind of anesthetists by hospitals or by surgeons, and the only exceptions to the rule requiring the employment of trained anesthetists is in those emergency cases where the best talent available should be employed, whether ranking as trained anesthetists or not. The really expert anesthetist is one who not only has a medical degree, with the experience and training that goes with it, but who has had special training in the administration of anesthetics and is peculiarly fitted by nature for the work. We shall never have enough of such anesthetists until we recognize the importance of having our anesthetics given by experts, and

we pay adequately for such service. If the surgeon desires to have his private anesthetist, he ought, in his own interest as well as in the interest of the patient, to secure the services of a medical man who has been especially fitted for the anesthetist's work, and not resort to a make-shift even though it is more economical to train a nurse for the work.

INDIANA UNIVERSITY CENTENNIAL CELEBRATION

Indiana University celebrated her centennial year with the Centennial Educational Conference, May 5-7, 1920. The sessions of May 5, Medical Day, were held in Indianapolis at the Claypool Hotel and consisted of an afternoon meeting in the Assembly Room, followed in the evening by a dinner in the Riley Room for the guests and the medical faculty of the university. The program of the afternoon session, at which Dr. Frank B. Wynn presided, was as follows:

Professor Aldred Scott Warthin, University of Michigan, "Spirchaeta Pallida."

Dean Elias Potter Lyon, University of Minnesota, "Graduate Education: Experience with the Minnesota Plan."

Professor Warthin, a graduate of Indiana University, class '88, reviewed for the benefit of his hearers, his fifteen year pursuit of the organism of syphilis throughout the tissues of the body. His address being illustrated by lantern slides made from stained specimens.

Dean Lyon explained and discussed the plan of the Graduate Medical School of Minnesota University in connection with the Mayo Foundation, speaking particularly of the aim in view and the advantages to be gained from supervised graduate work pointing toward advanced university degrees.

Following is the toastmaster's list of the dinner in the Riley Room:

Dean C. P. Emerson, Indiana University School of Medicine, toastmaster.

Col. Percy M. Ashburn, Surgeon-General's Office, "Education and Military Preparedness."

Dean Elias Potter Lyon, University of Minnesota, "The Medical School and the State."

Prof. Aldred Scott Warthin, University of Michigan, "State University Medicine."

Sir Robert A. Portner, University of Toronto.

President Edward A. Birge, University of Wisconsin.

President E. O. Lovett, University of Texas.

Professor E. P. Lewis, University of California.

An interesting feature of the meeting was an exhibit representing the twenty-seven medical schools which have existed in Indiana and finally merged into the present Indiana University School of Medicine. Visiting physicians viewed with keen interest the pictures of former classmates and faculties, long forgotten publications and textbooks, obsolete instruments, and many other articles, the entire collection occupying four rooms opposite the Assembly Room.

SELF-DRUGGING AND ITS CAUSE

We have had occasion previously to call attention to the impropriety and folly on the part of doctors in telling patients what they are using for certain diseases. In consequence many drugs are used without sufficient indication and oftentimes with great detriment to the patient. This is particularly true of aspirin, phenacetin, and some other drugs that might be mentioned. Within recent years some of the newer silver salts, notably argyrol, have been used in the treatment of certain inflammatory diseases of the mucous membranes and as usual doctors have no hesitation in telling patients what has been used with the end result of having the patients become self-prescribers. In the case of eye diseases this self-prescribing often ends disastrously, for argyrosis, or a staining of the conjunctiva and even the skin of the eyelids, which is more or less permanent, is getting to be rather common. Once in a while it comes about through the persistent prescribing by some doctor, but by far the greater number of cases occur from self-prescribing, though originally a doctor is responsible for the knowledge imparted to the patient that argyrol is being used, and is a harmless preparation.

This matter of telling patients what they are using in the way of medication is entirely wrong, and, furthermore, it is absolutely unnecessary. There is no reason why the patient should be told everything that is being done for him, though we admit that the utmost frankness is necessary in advising patients as to the nature of their trouble and what can be expected from treatment.

Not every patient who knows what is being prescribed for him becomes a self-drugger but by far the larger proportion of such patients do indulge in self-medication, and, therefore, it is the part of good judgment if the physician refrains from making his patient acquainted with the medication that is being prescribed.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THE fishing days are here, and after the long and disagreeable winter, with the strenuous work that has been the lot of most physicians, a day off with a rod and a search for the gamey bass will prove restful and enjoyable for most any doctor. Recreation, like most anything else, may come high, but we must have it.

It is a relief to find that it is possible to secure nurses through the Red Cross without paying the high fees which ordinarily are being paid to trained nurses at the present time, for there are many families who suffer from the lack of proper care for sick patients owing to their inability to meet the cost of a trained nurse. The Allen County Medical Society recently has sent out notices to its members calling attention to the visiting nurse service provided for Allen County (outside of the city of Fort Wayne) by the Fort Wayne Chapter of the American Red Cross.

WE might facetiously make inquiry as to whether the government thinks Indiana, with its authors, statesmen and literary people, is especially in need of home reading courses. However, we appreciate the fact that the government has selected Indiana as the first state to perfect a plan of cooperation with the Federal Bureau of Education, the State Department of Education, and the State University in connection with the home reading courses of the National Reading Circle. The work in Indiana will be carried on by Walton S. Bittner, Associate Director of Extension Education at the University, Bloomington, Ind. Any person in Indiana may enroll in the Reading Circle on application to the University. The courses are free.

THE Indiana State Medical Association ought not hold any annual session without following the precedent established years ago of having

an evening meeting, open to the public, at which meeting one or more public health questions should be discussed by some one thoroughly familiar with the subject. Just at the present time there is great need for more dissemination of knowledge concerning the control of cancer. When it is known that less than 80,000 American soldiers were killed or died of wounds or disease during the great war, whereas during the same period 180,000 people died of cancer in the United States, it will be readily understood how important the control of cancer is, and how vitally important is the dissemination of information concerning its control.

BEFORE any of the county medical societies of Indiana adjourn for the summer months, it would be well for them to appoint or elect a legislative committee whose duty it shall be to determine the attitude of candidates for the legislature on all subjects pertaining to medical education and medical practice, and to acquaint the members of the respective medical societies with the information obtained, so that intelligent action can be brought to bear in attempts to defeat those candidates who are likely to oppose medical progress. Our present medical standards are low enough, and it would be detrimental to the interest of the people as well as to the members of the medical profession to have the chiropractors, Christian Scientists, members of the League for Medical Freedom, and a horde of other opponents to medical progress sit in the legislature, and by their influence and votes defeat progressive medical legislation.

AGAIN the public is being warned against medical impostors who are operating in and around Clark County. Two men, giving their names as Dr. Harper and Dr. Van Camp, and representing themselves as agents of the State Board of Health, even displaying badges, claim to be "eye specialists," carrying with them instruments for examining and operating on the eye, and solicit patients in the name of the State Board of Health. Their work for the most part has been on children. Dr. Hurty, secretary of the State Board of Health, has issued a warning to the effect that neither of these men is a representative of the State Board of Health, and that they are unknown to any of the members. Indiana seems to be a fertile field for medical fakers of every sort, and the medical profession is more or less to blame for this condition because it has put forth very little effort to educate the public against these evils, and little or no prosecution of such offenders has been made.

As an indication of how little interest doctors take in politics it is only necessary to call attention to the fact that one of the ringleaders among Indiana chiropractors secured the nomination as a Republican candidate for the state legislature. So quietly was the thing pulled off that scarcely any one knew anything about it until after it was all over. Well, there are a goodly number of regular and reputable doctors who can and should make it their business to defeat the chiropractor whose sole object in going to the legislature is to upset the present medical laws and lower the standard of medical education and medical practice. Fortunately, opposed to the aforesaid chiropractic is a very high class Democrat who is and always has been a friend of the medical profession, and doctors of every political faith can well afford to vote for him. This logically leads to the further suggestion that doctors all over the state, irrespective of party affiliation, should vote for those candidates who will maintain or improve our present medical standards.

THIS is election year, and a good deal depends on the results. Many of the issues have to do with the safety and prosperity of the country as a whole, but to physicians the result of the state election is a matter for serious thought for the reason that the enemies of medical progress and the present medical educational standards of the state are mixed up in politics to such an extent that if they win we are going to have a general upheaval of our present standards and the quacks and incompetents will have full sway in the state of Indiana. Therefore, we strongly urge that the members of the Indiana State Medical Association, of whatever political stripe, know and know definitely the attitude of the various candidates for the state legislature on all subjects affecting medical legislation, before they cast a vote for such candidates. It is high time that every medical man in the state take an active interest in politics, and to that end we urge heartiest cooperation with the legislative committee of the Association, and with the legislative committees of the various county medical societies.

THE following item, taken from a recent issue of the *Optical Leader*, the official paper of the White-Haines Optical Company, contains "more truth than poetry," as the old saying goes:

WHAT KEEPS PRICES UP

Tom Jones may be a furnace moulder. Even so, he kicks his shoes off about the high price of clothing. But the little old \$10 a day he makes is more than he

needs, so Tom persuades two or three of his associates to join him and take a day off. That cripples the production of the factory. If all laid off at once, the cost would not be so great, but when Tom's department falls down, the other departments have to be kept going, and that makes the aggregate cost of the furnace considerably more.

While Tom is kicking about the price of clothing the boy that makes the clothing is kicking about the price of the furnace. Tom lays off; the clothing man pays more for the furnace. The clothing man lays off, and Tom pays more for his clothing. Then Tom wants more money for moulding furnaces and the clothing man wants more money for making clothing.

The result is that the innocent bystander pays more for furnaces, clothes, and everything else.

The application of the same sound, common sense that was used to win the war will solve the present problem. When every man produces all he can and consumes as little as he can, he will find that he has more money, that the tendency of goods is to lower in price instead of going up, and that things will soon reach the permanent level.

A MEMORIAL volume bearing the title "William Henry Wishard, a Doctor of the Old School," written by his daughter, Elizabeth Moreland Wishard, recently has come from press. This biography, preserving the memory of a remarkable man, beloved and esteemed by medical as well as political and philanthropic people throughout the state of Indiana, not only offers much of interest to "His Relatives and Friends," as the book is inscribed, but its account of a sturdy character representative of the best type of pioneer spirit, and its contribution to the history of his times make it a valuable permanent record containing much that is of general interest to the present and coming generations. The book is an attractive one of 340 pages and contains a number of excellent illustrations. On the cover is stamped an outline of the saddlebags used by the doctor in his early years when he covered miles of territory visiting his patients on horseback from Greenwood, Waverly and other points south of Indianapolis. The first 125 pages of the volume cover the strictly biographical and family history. The Wishard ancestry is traced to remote Scotch origin, the original name having been Wishart. Following the biographical sketch is an account of the services at Dr. Wishard's funeral with some of the tributes and appreciations written and spoken in his memory. The remainder of the volume is made up of a number of interesting and valuable historical addresses by Dr. Wishard. The work as a whole is an important contribution to local history, and will be valued highly by the host of friends and admirers of the late Dr. Wishard who died December, 1913, a little less than 98 years old.

BOTULINUS poisoning is getting to be altogether too common for comfort. We are glad to know that the United States Department of Agriculture, through its bureau of chemistry, has made extensive investigations, and employed specialists to study the causes of botulinus poisoning and the precautions which should be employed to prevent further difficulty. Packers of ripe olives have heartily cooperated in this investigation, and investigators agree that the trouble is not inherent in the type of container used. They report that lack of precaution has been responsible for the presence of *Bacillus botulinus* in the ripe olive fatalities which have occurred in New York, Detroit, Canton, Ohio; Memphis, Tenn., and Kalispell, Mont. They state that it is entirely practicable to sterilize both glass containers and tin cans at a temperature high enough to insure absolute sterilization. Since there is a possibility of danger from any ripe olives which have been insufficiently sterilized, the bureau of chemistry has suggested that all ripe olives in glass or in tin, wherever located, be carefully investigated and that any which show the slightest degree of decomposition, be destroyed. It was further suggested that all ripe olives which have not been processed at a sufficiently high temperature, be returned to the packers for immediate reprocessing at a sufficient temperature to insure complete sterilization. With few exceptions the olive packers have most heartily fallen in with all suggestions made in the interest of the public safety, and by mutual agreement entered into by practically all of the packers, they are now taking steps to withdraw from the market all ripe olives which have not been sterilized at a sufficient temperature. The bureau of chemistry sums up the report with the statement that there is no reason to anticipate danger from properly packed and processed ripe olives, whether they be packed in tin or glass containers.

THE following editorial from the *Journal of the American Institute of Homeopathy* for May, 1920, sets forth very strongly just where the homeopaths stand on the question of "medical freedom" and "drugless healing":

"FORBID THE BANS."—There lies before us a reprint from the April issue of *Physical Culture Education* under the title, "Shall We Have Medical Freedom?" extending an invitation to seven groups of drugless practitioners and including "homeopaths." This is probably on the supposition that they will find malcontents who will be willing to vote from the American Institute of Homeopathy one thousand dollars to

"form plans for a political union of our forces against allopathic domination, governmental and otherwise."

Having followed rather carefully in past years the career of this organization, or at least some of its promoters, we are unalterably opposed to any such lineup for homeopathic physicians. Nothing will drive the majority of thoughtful practitioners of homeotherapy quicker into the political organization of the dominant ranks than the implication that we stand for all the fallacies of the medical self-styled groups of "medical freedom."

The writer of the reprint comments on "the present control of all governmental policies concerned with the health of the people by the representatives of allopathic medicine." Dr. William A. Evans, of national reputation as a former health commissioner of Chicago, in a recent public address, remarked that representatives from graduates of homeopathic schools had more than their numerical share of public health positions. To be explicit, the reader is reminded that Dr. George H. Simmons, of the American Medical Association, is a graduate of a homeopathic medical school; Dr. C. St. Clair Drake, of the Illinois State Board of Health; Dr. Royal S. Copeland, Commissioner of Health of New York, as was Dr. Eugene H. Porter, Commissioner of Health of the state of New York.

Again, the writer comments on "a time when the practice of medicine is ceasing to be the practice of medicine, that is to say, when the medical practice is rapidly abandoning drug medication." We may be using less medicine than formerly, but if homeopathic therapy stands for anything, it stands for a specialty in drug therapeutics. Why join the drugless ranks? True, we are not in accord with much of the drug practice of the dominant school, and we are perfectly willing to fight when our rights to select a remedy are threatened. On the other hand, we hold the art of healing in such high regard that we would recommend that every practitioner who attends the sick should be grounded in the fundamentals which have to do with the body, its ailments and mode of recuperation; namely, anatomy, physiology, chemistry, physics, pathology, psychology, materia medica.

THE number of small children poisoned by poisonous fly-destroyers is appalling. Formerly blotting paper soaked with arsenic was much used for these fly-destroyers. A little piece of this was put in an open saucer with some water and a little sugar. More recently shallow boxes of tin with a wick through the top have come into use, but on account of the habit of children of putting everything to their lips these seem to be as dangerous as the open saucer of poisoned water. The fact that sugar is added to draw the flies makes these boxes especially dangerous to young children. In South Africa the authorities have forbidden the sale, except by licensed chemists, of certain arsenical fly destroyers, particularly the tin boxes which have a wick or wicks through which the poison is drawn. Some cases of poisoning from the use of fly poisons are doubtless never reported, for

it is difficult, perhaps impossible, for even an experienced physician to distinguish a case of arsenical poisoning from cholera infantum, the symptoms being so similar. How many children have been poisoned by these fly poisons and the deaths ascribed to cholera infantum can never be known. The cases reported are all children from slightly less than a year to 6 or 7 years old. In many cases these children are not old enough to tell what they have taken if questioned about their illness, and unless seen taking the poison the chances are that the cause of the child's illness will never be known and it will be thought the child had cholera infantum. The danger is especially great to children of the foreign born for, as is well known, many of the foreigners are slow to call medical aid in case of children's ailments. In country districts, where it often takes several hours to get a physician, it is especially dangerous to use fly poisons. These fly poisons are often exposed on the window sill because flies are attracted to the light. Babies also are attracted by the light and the window sill being in reach is therefore the most dangerous place to expose poisonous fly-destroyers of any kind. There are as efficient and more sanitary ways of catching or killing flies, and fly poisons if used at all should not be used in any home where there are children or where children may visit. Certainly in our propaganda for health conservation, child betterment and educational movements this peril should be recognized and a warning be issued so that the coming summer does not witness a repetition of these fatalities and accidents that are wholly preventable. Arsenical fly-destroying devices are as dangerous as the phosphorus match. They should be abolished.

PHYSICIANS AS UNPAID COLLECTION AGENTS.—There seems no limit to the number of agencies which desire to assist the doctor in his efforts to get along, from remarkably profitable investments to collecting bills which he has long given up as hopeless. *The Journal of the American Medical Association*, August 23, publishes an instance well worth noting: Physicians in different parts of the country have received letters addressed, not to them personally, but to them as "Town Physician" of the city or village in which they live. These letters, typewritten and obviously form letters, read:

Dear Sir: Recently I wrote John Doe of your city but my letter was returned to me by the postoffice undelivered which leads me to believe that the family has moved to some other address without letting me

know. If it is not asking too much of you, I assure you it would be a great favor if you could advise or find out for me without putting yourself to too much trouble where a letter can reach this party. It is a matter of considerable importance.

Thanking you for your kindness and assuring you of my appreciation, I remain,

Yours very truly,

HELEN TAYLOR.

The name of the person inquired about, of course, varied; so may it be said, did the name of the person from whom the letter purported to come. Instead of being a letter from "Helen Taylor" it might be from "W. J. Mitchell" or from some other party, although the handwriting of the signatures was suspiciously similar. In every case a stamped envelope directed, as the case might be, to "Helen Taylor," "W. J. Mitchell," etc., accompanied the request for information. In every instance, too, this envelope was addressed to 146 West Fortieth Street, Chicago. *The Journal's* investigators found that there is no 146 West Fortieth Street, and, in fact, could not be as this address would come at a place that is occupied by railroad tracks. It became obvious, therefore, that these various form letters, evidently from a common source but sent out under different names, were being delivered through the connivance of a postoffice employee. *The Journal* laid the matter before the chief inspector of the Postoffice Department at Washington with a request for information. In due time the inspector reported that: It was ascertained that the communications in question were form letters sent out by the Hartman Company of Chicago with a view to locating persons who owed them accounts. The concern referred to in the inspector's report is the Hartman Furniture Company, which sells housefurnishings on the installment plan. Its advertising is "Let Hartman Feather Your Nest." So long as physicians remain good-natured and "easy" the Hartman concern is presumably not going to let a chance to feather its own nest go by. Why pay a collecting agent when "Town Physicians" are so accommodating? We might add that the most recent letter of this sort that we have seen was addressed to "Minister of Gospel or Town Physician." Religious papers please copy!—*Journal of Iowa State Medical Society.*

DEATHS

MRS. HARRIET COREY HILL, aged 89, widow of Dr. Nathan S. Hill, died May 13, at her home in Muncie.

MRS. EMMA A. SNAPP, wife of Dr. J. A. Snapp of Goshen, died May 6, aged 50 years. Death was due to blood poisoning.

WADE E. SIMPSON, M.D., died recently at Martinsville, aged 42. He was graduated from the Medical College of Indiana in 1903.

CYPRIAN R. WRIGHT, M.D., Frankton, died recently, aged 56. Dr. Wright was graduated from the Medical College of Indiana in 1888.

JESSE D. GARR, M.D., died April 15 at his home in Summitville, aged 64 years. Dr. Garr was graduated from the Ohio Eclectic Medical College in 1896.

DONALD M. KELLY, M.D., died at his home in Brookston, April 23, aged 65. He was graduated from the University of Michigan Medical College in 1881.

ALBERT DELL SWARTZ, M.D., Indianapolis, died at the Methodist Hospital in that city, May 17, aged 54 years. He was graduated from the Indiana University School of Medicine in 1908.

HENRY B. HILL, M.D., died May 24, at his home in Logansport, aged 54 years. He was graduated from the Rush Medical College in Chicago in 1895. Dr. Hill was a member of the Cass County Medical Society, the Indiana State Medical Association and the American Medical Association.

LUNSFORD ELIZA COX, M.D., Greenwood, took his own life in the Norways Sanitarium, Indianapolis, April 26, aged 37 years. He was graduated from the State College of Physicians and Surgeons in 1907. He was a member of the Johnson County Medical Society, the Indiana State Medical Association, and the American Medical Association.

CHARLES J. HELM, M.D., died at his home in Peru, April 26, aged 57 years. Death was due to pneumonia of but six days' duration. Dr. Helm was graduated from the Medical School of Harvard University in 1887. He was a member of the Miami County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. BEN PENCE of Churubusco will locate in Columbia City for the practice of medicine.

THE Abbott Laboratories have established a branch office at 57 Colborne Street, Toronto, Canada.

THE King's Daughters Hospital at Madison, has recently combined with the City Hospital of Madison.

THE next meeting of the Union County Medical Society will be held in Rushville on October 21 next.

THE annual meeting of the American Public Health Association will be held at San Francisco, September 13-17.

DR. LEON WHETSELL of Bloomington has established a sanitarium on College Avenue and Eighth Street of that city.

DR. AND MRS. KELSO of Eminence have removed to Mooresville where Dr. Kelso will continue the practice of medicine.

THE Howard County Council, in special session April 22, voted an appropriation of \$52,000 for the erection of a tuberculosis hospital.

SIR WILLIAM OSLER bequeathed his medical and scientific library to McGill University, Montreal, according to word from London.

ADAMS COUNTY is to have a new county hospital at the probable cost of \$100,000, as a result of a special election held May 8 at Decatur.

DR. SUMNER A. FURNISS, Indianapolis, was elected Lieutenant-Commander of the Supreme Council of Colored Scottish Rite Masons at Philadelphia.

DR. ERIC CRULL, Fort Wayne health commissioner, left April 21 for St. Louis where he attended the national convention of tuberculosis societies.

DR. A. E. BURKHARDT of Tipton left May 28 for Boston to attend the course on Physical Diagnosis by Dr. Richard Cabot during the month of June.

DR. ERIC A. CRULL of Fort Wayne has been appointed a member of the American Sanitary Association, a subdivision of the National Tuberculosis Association.

THE hospital buildings at Fort McHenry, Md., are to be turned over to the U. S. Public Health Service for use in connection with war risk insurance patients.

AN appropriation of \$99,303,000 for 1921, to be used in the rehabilitation of wounded soldiers, has been asked of Congress by the Federal Board for Vocational Education.

DR. J. H. MCFARLAND, who has practiced medicine in New Pittsburg and vicinity for half a century, has retired from the profession and will devote his time to his farms.

THE Home Hospital, Muncie, has been purchased by the city and will, in the future, be operated as a public institution. The institution will be controlled by a board of governors.

ONE hundred and fifty South American medical and other scientific men are reported to be on their way to the United States to study medical education and progress in this country.

THE Public Health Nursing Association of Indianapolis has launched a campaign among its friends for a fund of \$1,000 to provide an automobile for the quick transportation of nurses.

ARNOLD M. TALBOTT of New York, son of Dr. and Mrs. John H. Talbott of Indianapolis, and Helen Mary Clark, daughter of Dr. and Mrs. Edmund D. Clark, were married May 19 in Indianapolis.

A LARGE number of trachoma cases have been found at Hammond, Ind., and Dr. J. N. Hurty, secretary of the State Board of Health, has taken appropriate measures to control the spread of the disease.

THE next meeting of the American College of Surgeons will be held the week of October 11 in Montreal, with headquarters at the Windsor Hotel. This will be the first meeting outside of the United States.

A BILL appropriating \$30,000,000 for the aid during the next three years of disabled service men and women who have been discharged and are unable to take care of themselves, has been introduced into Congress.

MISS EDNA MCCULLOUGH, Indianapolis, has been selected as health nurse for Logansport and Cass Counties by the board of directors of the Public Health and Welfare Association. She will succeed Miss Gladys Brandt.

DR. RUPERT BLUE, former surgeon-general of the United States Public Health Service, and Senior Surgeon Joseph H. White, have been named assistant surgeons-general at large of the United States Public Health Service.

MARGARET P. CHURCH of Fort Wayne was elected president of the State Board of Registration and Examination of Nurses at a special meeting of the board May 19. Edna Humphrey of Crawfordsville was reelected secretary.

THE Johns Hopkins Hospital has recently received a gift of \$100,000 from Henry Phipps of New York, founder of the Phipps Psychiatric Clinic. This amount will be used as the nucleus of a permanent endowment fund.

W. F. BAKER, M.D., who has been house physician and roentgenologist at St. Vincents Hospital, Indianapolis, has resigned his position to become associated with Dr. K. C. Hershey of Carmel in the practice of medicine.

ACCORDING to the report of the secretary of the Indianapolis Board of Health the death rate for Indianapolis for 1919 was 13.9 persons out of each 1,000. In 1918 the death rate was 19.04. The birth rate for 1919 was 19.04 and for 1918, 20.5.

SIR ARCHIBALD E. GARROD, K.C.M.G., M.D., F.R.S., has been appointed to the Regius chair of medicine at Oxford, to succeed the late Sir William Osler. Sir Archibald Garrod is one of the examiners in medicine in the University of Glasgow.

THE military doctors of Wells County were entertained by the civilian doctors at a banquet in Bluffton, April 20. Special guests of the evening were the Drs. L. P. Drayer and Miles F. Porter of Fort Wayne, who presented papers before the society.

A COMMISSION appointed by the Swedish government has recently issued a report advocating the introduction of compulsory health insurance and maternity insurance. It is estimated that 80 per cent. of the population will be included in this scheme.

A PETITION has been filed in California to place on the ballot an initiative measure creating a chiropractic board and providing for the licensing of all chiropractics practicing at this time. The measure will be voted on at the next general election, November, 1920.

THE old health board of Goshen is to remain in office as a result of the settlement of the controversy between the board and the new mayor. An effort was made by the mayor on his entrance into office to install a new board of health, but the effort was defeated.

TWELVE nurses and fifty-one doctors received their degrees at the Indiana University School of Medicine this June, according to announcement by Burton D. Myers, head of the Medical Department of the University. This is the largest class in medicine in many years.

THE purchase by the federal government of the quarantine station in New York harbor has been approved by the House of Representatives. The purchase price is \$1,395,275. The Senate, which has always been favorable to the purchase, is not expected to raise any objections.

A DONATION of \$500,000 has recently been made by members of the family of Henry Phipps of Philadelphia for medical research in tuberculosis. The money will go toward establishing an endowment fund for the Henry Phipps Institute of the University of Pennsylvania.

DR. J. N. HURTY, secretary of the State Board of Health, left, May 15, for New York and Washington, D. C., to deliver a number

of addresses before the New York Academy of Medicine and before the International Conference of State and Provincial Boards of North America.

AN effort is being made to establish in Fort Wayne a hospital for colored people. Officers and an administrative committee under the name of the Cosmopolitan Hospital Association, have been appointed, and plans are under way for the purchase and equipment of a building for this purpose.

THE Samuel D. Gross Prize of the Philadelphia Academy of Surgery for 1920, amounting to \$1,500, has been awarded to Dr. Evarts A. Graham, of Washington University Medical School, St. Louis, for his essay entitled, "Some Fundamental Considerations in the Treatment of Empyema Thoracis."

THE board of county commissioners and county council of Clark County, were instructed to issue bonds, make an appropriation, and fix a levy for establishing and maintaining a memorial hospital in Jeffersonville in honor of the soldier dead of Clark County, as the result of a special election held May 4.

THE Wells County Council, in special session, May 1, appropriated \$30,000 for the construction of an addition to the County Hospital. The addition will be a second floor and will be provided for an additional fifteen beds and will make the local hospital one of the largest in this section of Indiana.

A NEW home for the nurses of the Hope Methodist Hospital, Fort Wayne, has been purchased at a cost of \$55,000. Heretofore the nurses have been housed on the second floor of the hospital, occupying rooms badly needed for patients. The purchase will add thirty-five rooms to the capacity of the hospital.

A BRONZE bas relief of Dr. Abraham Jacobi was presented to the New York Academy of Medicine by George McAneny, his son-in-law, at a memorial meeting on May 6. Dr. George E. Vincent, president of the Rockefeller Foundation, delivered an address on "The Life and Influence of Dr. Jacobi Upon His Time."

DURING May the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Dietetic Cellulose Co.: CellufLOUR.

Intra Products Co.: Ven-Iron Cacodylate; Ven-Iron Cacodylate with Sodium Chloride.

DR. JOSEPH SIMMS, who died of cerebral hemorrhage in New York on April 11, in his 87 year, bequeathed his body to Dr. Edward A. Spitzka for scientific study. The brain of Dr. Simms has been preserved by Dr. Spitzka for the detailed study of its morphologic features in comparison with the brains of other notable men.

THE Indianapolis Board of Health was authorized, April 22, to make a temporary loan of \$125,000 to cover operating expenses of the City Hospital by the state board of tax commissioners. This is in accord with the program adopted by city officials recently, to prevent the closing of the hospital because of lack of money.

DR. RICHARD CLARKE CABOT, professor of clinical medicine at Harvard Medical School and chief of the West Medical Service of the Massachusetts General Hospital, has been appointed professor of social ethics at Harvard College. Dr. Cabot enters at once on his new duties, at the same time continuing his present connections.

THE Umberto I Prize of 3,500 lire for the best orthopedic work of invention is open to members of the medical profession in any country. The competition will close on the last day of this year. Full particulars will be supplied those wishing to compete on application to the president of the Instituto Ortopedico Rizzoli, Bologna, Italy.

BIRTHS AND DEATHS IN U. S.—There were 1,363,649 infants born alive in 1918 in the birth registration area of the United States, representing a birth rate of 24.4 in 1,000 of population. The total number of deaths in the same area was 1,014,620, or 18.2 in 1,000. The mortality rate for infants under 1 year averaged 101 in 1,000 live births.

At the sixty-second annual meeting of the Indiana State Dental Association, held at the Claypool Hotel, Indianapolis, May 19, the fol-

lowing officers were elected: Dr. A. R. Ross, Lafayette, president; Dr. Charles R. Jackson, Indianapolis, president-elect; Dr. Jackson and Dr. F. R. Hinshaw, Indianapolis, were elected to the national house of delegates.

A VOCATIONAL school for veterans of the recent war may be established by the Federal Board for Vocational Education in any hospital where there are ex-service men in groups of sufficient numbers to justify the establishment of such a school. With this idea in mind, an officer of the Public Health Service has made a survey of the various soldiers' homes.

THE Northwestern Indiana Conference of the Christian Church plans to build a hospital on the banks of the Tippecanoe River near Ora. Options have been taken on two tracts as proposed sites. It is planned to build a hospital large enough to provide about 300 beds. The proposed institution will be maintained by the proceeds from a large endowment fund.

At the fifty-sixth annual convention of the Indiana Eclectic Medical Association held in Indianapolis, May 22, the following officers were elected: Dr. J. H. Ashabrunner, New Albany, president; Dr. J. W. Kannell, Fort Wayne, and Dr. W. H. Wagner, Logansport, vice presidents; Dr. J. E. Holman, Indianapolis, secretary, and Dr. C. A. Tindall, Shelbyville, treasurer.

At the fifty-fourth annual convention of the Indiana Institute of Homeopathy held in Indianapolis, May 12, the following officers were elected: President, Dr. C. E. Canday, Newcastle; first vice president, Dr. O. C. Jones, Indianapolis; second vice president, Dr. G. E. Lowe, Indianapolis; secretary, Dr. John B. Talmage, Crawfordsville; treasurer, Dr. J. S. Slabaugh, Nappanee.

THE Good Samaritan Hospital, Vincennes, is to have a new addition, at the approximate cost of \$150,000, which will triple the ward capacity and add fifty beds to the hospital. An obstetric department and nursery are to be constructed, and the operating room is to be enlarged and a special one added for the use of the eye, ear, nose and throat. A nurses' home is also to be constructed.

THE Indiana Dental College has obtained a ninety-nine year lease on the four-story building at Pennsylvania and Walnut Streets, Indianapolis. The property has been acquired for a new home for the college. The building is to be remodeled and a two-story addition with 10,000 square feet of floor space will be built in the rear. New equipment and improvements will cost about \$100,000.

THE United States Civil Service Commission announces an open competitive examination for physicians for vacancies in the Panama Canal Service, to be given July 7 and Sep. 8, 1920. The entrance salary is \$225 a month, and promotions range from \$250 to \$340, and higher. Both men and women may enter this examination, and all applicants must be between 22 and 30 years of age, though age limits do not apply to persons entitled to preference because of military or naval service. Applicants should apply at once to the Civil Service Commission, Washington, D. C.

THE Sixth District Medical Society held a meeting in Rushville, May 27, under the direction of J. C. Sexton, Rushville, president, and G. H. Smith, New Castle, secretary. The following scientific program was carried out: "The Dignity of the Rectum," Dr. B. G. Keeney, Shelbyville; "The Gallbladder," Dr. R. D. Morrow, Connorsville; "Physiological Theory as to the Cause of Epilepsy," Dr. C. A. Marsh, New Castle; "The Indications and Technic of Blood Transfusion," Dr. W. D. Gatch, Indianapolis; "Protein Poisoning with Cutaneous Manifestations," Dr. H. R. Alburger, Indianapolis.

At the New Orleans meeting of the American Medical Association the following eminent physicians were elected to honorary fellowship: Dr. Norman Walker, representing the three Scottish Medical Corporations; Col. H. J. Waring, M.S., F.R.C.S., representing the Royal College of Surgeons of England; Sir Humphry D. Rolleston, K.C.B., M.D., Royal College of Physicians, London; Dr. E. E. Desmarest, professor of surgery, University of Paris; Dr. Gustave Roussy, professor of medicine, University of Paris; Dr. Jules Voncken, Liege, Belgium; Dr. Iwaho Tsuchiya, Japan, physician to the imperial court of Japan.

THE United States Civil Service Commission announces an open competitive examination for bacteriologist, to fill a vacancy in St. Elizabeth's

Hospital, Washington, D. C., at \$2,500 a year, with temporary increase granted by Congress of \$20 a month, and maintenance. Both men and women may enter this examination, but must have reached their 26th birthday on the date of the examination, though age limits do not apply to persons entitled to preference because of military or naval service. Further information may be obtained by writing the secretary of the Fourth Civil Service District, Eighth and E Streets, N. W., Washington, D. C.

At the meeting of the American Medical Association, held April 16-30 in New Orleans, the following officers were elected for the ensuing year: President, Dr. Hubert Work of Pueblo, Colo.; vice president, Dr. Isadore Dyer of New Orleans; secretary, Dr. Alexander R. Craig of Chicago (reelected); treasurer, Dr. William A. Pusey of Chicago (reelected); speaker of the House of Delegates, Dr. Dwight H. Murray of Syracuse, N. Y.; vice speaker of the House of Delegates, Dr. F. C. Warnshuis of Grand Rapids, Mich.; trustees, Dr. Charles W. Richardson of Washington, D. C.; Dr. W. T. Sarles of Sparta, Wis., and Dr. Walter T. Williamson of Portland, Ore.

THE Federal Board for Vocational Education estimates that there are, among the injured veterans of the World War, between ninety and 100 cases of men whose speech became absolutely unintelligible as the result of mouth or neck injuries, aphasia, or other causes. These men are being trained in agriculture, auto mechanics, commercial courses, and chemistry. There are probably several thousand men throughout the country who became deaf in one ear, or who have suffered slight impairment of hearing in both ears. However, there are only about 200 for whom lip-reading is necessary. Therefore, the approximate number of hearing and speech defect cases will be about 300.

THE United States Civil Service Commission announces an open competitive examination for physicians for vacancies in the positions of physicians in the Indian Service, acting assistant surgeon in the Public Health Service, surgeon in the Coast and Geodetic Survey. Both men and women may enter this examination and must be 21 years of age. Entrance salaries in the Indian Service range from \$1,000 to \$1,200 a year; in the Public Health Service from \$480 for part time to \$2,400 or \$3,000 for full time; Coast and Geodetic Survey, \$1,020 a year, and allowance

for subsistence at \$1 a day while serving on board ship, except in the Philippines, where the allowance for subsistence is \$2.50 a day. Further information may be obtained by writing to the Civil Service Commission, Washington, D. C.

A STATE organization of the Indiana members of the American College of Surgeons was perfected at a meeting at the Claypool Hotel in Indianapolis, May 7. Dr. Franklin H. Martin, general secretary and organizer for the national association, presided and the following officers were elected: Dr. Miles F. Porter, Fort Wayne, chairman; Dr. E. D. Clark, Indianapolis, secretary; Dr. James Y. Welborn, Evansville, counsellor. The state organization plans to conduct a clinic once a year in some Indiana city. The governing body of the Indiana state section of the clinical congress of the college consists of the following delegates elected from the congressional districts: Dr. James Y. Welborn, first district; Dr. Charles E. Barnett, second district; Dr. John Paul Salb, third district; Dr. Alfred P. Roope, fourth district; Dr. Spencer M. Rice, fifth district; Dr. Charles Marvel, sixth district; Dr. John Oliver, seventh district; Dr. Maynard Alvernise Austin, eighth district; Dr. Paul J. Barcus, ninth district; Dr. Richard P. Wetherill, tenth district; Dr. Edward Harvey Griswold, eleventh district; Dr. Luzerne H. Cook, twelfth district; Dr. Stanley A. Clark, thirteenth district; Dr. Miles F. Porter, Fort Wayne, delegate-at-large, and Dr. Edwin Walker, Evansville, and Dr. Joseph R. Eastman, Indianapolis, senators to the congress.

IN accordance with the resolution adopted at the Fifth International Sanitary Conference, held in the city of Santiago, Chile, from Nov. 5-11, 1911, the date, Dec. 12-20, 1920, has been fixed for the assembling of the Sixth International Sanitary Conference in the city of Montevideo, Uruguay. The following official correspondence in regard to the call and the provisional program of the conference are printed in the interest of the conference:

INTERNATIONAL SANITARY BUREAU

WASHINGTON, D. C., May 10, 1920.

HON. JOHN BARRETT,
Director General, Pan-American Union,
Washington, D. C.

Sir:—In accordance with a resolution adopted at the Fifth International Sanitary Conference held at Santiago, Chile, and with the approval of the International Sanitary Bureau, I am inclosing the call for the meeting of the Sixth International Sanitary Conference. A copy of the provisional program for this conference is also inclosed.

I request that, in conformity with the provisions of Paragraph 7 of the resolutions relating to sanitary police, adopted at the Second International Conference of American States, you take the necessary steps to bring this call and the provisional program to the attention of the governments concerned.

Respectfully,

H. S. CUMMING,
Surgeon-General, U. S. Public Health Service, Provisional Chairman, International Sanitary Bureau.

SIXTH INTERNATIONAL SANITARY CONFERENCE OF THE AMERICAN REPUBLICS

To be held in Montevideo, Uruguay, Dec. 12-20, 1920

INTERNATIONAL SANITARY BUREAU OF THE AMERICAN REPUBLICS

WASHINGTON, D. C., May 10, 1920.

In compliance with the resolution adopted at the Fifth International Sanitary Conference, the Sixth International Sanitary Conference of the American Republics will be held in Montevideo, Uruguay, Dec. 12-20, 1920, under the presidency of Dr. E. Fernandez Espiro and the auspices of the government of Uruguay. A number of important sanitary subjects will be discussed at this conference, and it is expected that all the nations interested will be duly represented.

PROGRAM OF THE SIXTH INTERNATIONAL SANITARY CONFERENCE OF THE AMERICAN REPUBLICS TO BE HELD IN THE CITY OF MONTEVIDEO FROM DEC. 12 TO 20, 1920

Each delegation shall send in a printed memoir, accompanied by an abstract, to the secretary of the conference fifteen days before its opening. The copies so remitted shall be distributed in due time among the delegates, in order that they may inform themselves of the contents before the opening of the sessions.

This memoir shall comprise the following points:

1. Sanitary laws, ordinances, and regulations imposed since the fifth conference.
2. Adoption of the resolutions passed by the preceding conferences.
3. Enumeration of the contagious diseases which may have prevailed since the fifth conference (in particular, influenza), measures adopted to avoid its propagation, number of cases and deaths.
4. Considerations relative to the outbreak and development of bubonic plague; methods employed to combat it; their results.
5. Frequency of epidemic cerebrospinal meningitis, transmissible anterior poliomyelitis, and lethargic encephalitis.
6. Actual status of the combat against tuberculosis, yellow fever, malaria, trachoma, and ankylostomiasis.
7. Data relative to leprosy and the measures put in practice to prevent its diffusion.
8. Actual status of the combat against avariosis (venereal diseases).
9. Organization and operation of the service of disinfection. Work carried out.
10. Movement of population and rate of mortality during the last five-year period.
11. Water supply and sewerage service. Their extent.
12. Application of different systems of paving.

13 Organization and operation of the service of maritime sanitation.

14. Work of the health commissions of each one of the American republics.

15. Data with regard to the operation of the Sanitary Information Center of Montevideo.¹

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County	Secretary	Date
1.	Decatur,	C. R. Bird.....	Feb. 1, 1920
2.	Fayette,	R. H. Elliott.....	Feb. 1, 1920
3.	Franklin,	E. M. Glaser.....	Feb. 1, 1920
4.	Fulton,	A. E. Stinson.....	Feb. 1, 1920
5.	Jasper-Newton,	O. E. Glick.....	Feb. 1, 1920
6.	Jefferson,	O. A. Turner.....	Feb. 1, 1920
7.	Marshall,	Harry Knott.....	Feb. 1, 1920
8.	Posey,	John Ranes.....	Feb. 1, 1920
9.	Shelby,	F. E. Bass.....	Feb. 1, 1920
10.	Sullivan,	J. B. Maple.....	Feb. 1, 1920
11.	Union,	J. D. Shonwald.....	Feb. 1, 1920
12.	Warrick,	J. F. Samples.....	Feb. 1, 1920
13.	Washington,	Claude B. Paynter.....	Feb. 1, 1920
14.	Wells,	G. B. Morris.....	Feb. 1, 1920
15.	Whitley,	H. M. Egoft.....	Feb. 1, 1920
16.	Delaware-Blackford,	H. D. Fair.....	March 1, 1920
17.	Hancock,	C. H. Bruner.....	March 1, 1920
18.	Knox,	D. H. Richards.....	March 1, 1920
19.	Madison,	Doris Meister.....	March 1, 1920
20.	Monroe,	J. E. P. Holland.....	March 1, 1920
21.	Scott,	J. P. Wilson.....	March 1, 1920
22.	White,	H. B. Gable.....	March 1, 1920
23.	Marion,	Leslie H. Maxwell.....	April 1, 1920
24.	St. Joseph,	R. B. Dugdale.....	April 1, 1920
25.	LaGrange,	A. J. Hostetler.....	April 1, 1920
26.	Miami,	M. L. Wagner.....	April 1, 1920
27.	Steuben,	Mary Ritter.....	April 1, 1920
28.	Tippicanoe,	W. M. Reser.....	April 1, 1920
29.	Wabash,	L. O. Sholty.....	April 1, 1920
30.	Fountain-Warren,	A. M. Sullivan.....	May 1, 1920
31.	Henry,	W. H. Stafford.....	May 1, 1920
32.	Jay,	C. A. Paddock.....	May 1, 1920
33.	Montgomery,	A. L. Loop.....	May 1, 1920
34.	Vanderburgh,	William E. Barnes.....	May 1, 1920
35.	Bartholomew,	H. H. Kamman.....	June 1, 1920
36.	Dearborn-Ohio,	E. J. Libbert.....	June 1, 1920
37.	Huntington,	F. B. Morgan.....	June 1, 1920
38.	Vigo,	W. D. Asbury.....	June 1, 1920

INDIANAPOLIS MEDICAL SOCIETY

March 16, 1920

Meeting was called to order by the president, Dr. James H. Taylor. The minutes of the previous meeting were read and approved. The applications of Drs. Ernest Rupel, Harry H. Heinrichs, Donald L. Miller and Edwin G. Kyte were read for the second time and referred to the Council.

The secretary read some extracts from the revised narcotic law and explained the meaning as interpreted by the government inspectors.

Program: Paper, "Diagnosis and Treatment of Ectopic Pregnancy," Dr. E. E. Padgett.

Abstract.—1. Ectopic gestation more commonly present than diagnosed.

2. Caused by some pathology in the generative system which should be corrected before abnormal pregnancy occurs.

3. Many cases not operated because no severe hemorrhage; terminate as uterine abortion, tubal abortion, death of fetus before rupture or rupture without serious hemorrhage into broad ligament.

4. Diagnosis most often confused with early uterine pregnancy. Careful study of history and early symptoms necessary.

5. A woman in child-bearing period always regular, having failed to menstruate for one or more months, is probably pregnant. Return of menstruation usually means effort to rid herself of an abnormal pregnancy regardless of its location.

6. These cases are all surgical.

7. The time to operate is before rupture has taken place.

8. Rupture into free peritoneal cavity is condition to be most feared. Sooner or later followed by extreme bleeding. Prompt operation needed.

9. After rupture cases showing improvement in pulse not emergency operations. Operate when general condition improves.

10. Intravenous salt solution or blood transfusion good after bleeding has stopped. No objection to control bleeding.

11. Very few cases actually die from this condition. Paper, "Lower Abdomen Borderline Cases," Dr. F. C. Walker.

Abstract.—Paper limited to closely related cases occurring in lower female abdomen. Diagnosis may be simplified by classifying lesions: 1. Those associated with inflammatory changes. 2. Those related in some way to pregnancy. 3. Those resulting from new growths. 4. Those due to trauma. Acute and chronic appendicitis most frequent pathological conditions. Each case must be individualized. Appendicitis may be difficult or impossible to differentiate from disease of right tube and ovary. Very frequently involved in same inflammatory process. Leukocyte count may be of aid. Misleading in case of high count in ruptured gestation. Reproductive organs the seat of many inflammatory conditions: (1) Gonorrheal; (2) pyogenic; (3) tuberculous. Each type has its own peculiar life history. Acute gonorrheal pelvic conditions should not be operated. Treat medicinally and operate after abatement of acute symptoms. Acute flare-ups of old gonorrheal pelvic conditions operated with safety during acute symptoms. Septic metritis and salpingitis must be differentiated from gonorrheal. Operation in such cases is much more dangerous. Tuberculous lower abdomen cases usually give symptoms of chronic inflammation. Ectopic gestation most frequent condition associated with pregnancy causing pelvic lesions. Often very difficult to diagnose. Ruptured form may resemble new growth with twisted pedicle, or ruptured cyst. Pathologic conditions occurring in lower abdomen may present such closely related symptoms that definite, clean cut differential diagnosis is impossible.

Conclusions.—1. Closely related cases in their symptomatology compel one to keep in mind the sharp distinctions of one condition from the other, and also to keep before one the possible conditions likely to occur in this region. 2. There is no short cut road to

1. This point will be treated by Legation of Uruguay.

a diagnosis in the closely related cases. 3. In cases where it is impossible to arrive at a positive diagnosis it is best to open the abdomen and meet the pathological condition fairly and squarely and deal with it according to the indications.

DISCUSSION

Dr. M. N. Hadley: Reasons for rarity of first class gynecological diagnosis: 1. The gynecologists have become abdominal surgeons while the abdominal surgeons have gone into general surgery. 2. Modern diagnostician relies too much on laboratory and roentgen ray. The gynecologist cannot use these aids but must make diagnosis himself. Dr. Walker's classification is helpful up to a certain point but after taking history and classifying, a diagnosis is still to be made. Appendicular diseases most puzzling to unravel account of right tube and ovary conditions.

Dr. G. B. Jackson: Interested in Dr. Walker's classification. Difficulty of differentiating. Most of them are acutely surgical. Only one treatment, surgery, and then we know diagnosis. Tubal pregnancy easier to diagnose before rupture. Tuberculosis of cecum or pelvic peritoneum very difficult to differentiate as lower abdomen case. Also necrosis of lower part of recti muscles following flu or other infections (typhoid). Advantage of careful rectal examination to differentiate.

GENERAL DISCUSSION

Dr. H. O. Pantzer: Two additional points to be remembered in extra uterine pregnancy: (1) Pulsation is a prominent symptom and must be searched for; (2) simple diffuse inflammation has elevation of temperature. Ectopic pregnancy runs temperature only in presence of complications. Rectal temperature therefore important. In any pelvic condition use bimanual vaginal and rectal examination. Malformation of parts gives rise to appendicite inflammation and on account of the ileogenital band is more easily communicated to the right ovary. Tuberculosis extends the entire length of the fallopian tube and is characterized by nodules and soft parts alternating. Gonorrhea gives cord-like tube entire length.

Dr. H. K. Bonn: Mentioned case of woman two and one-half months married. Missed last menstruation; sudden pain; subnormal temperature; rapid pulse; slight bleeding. Had morphin and atrophin with improvement. Operated, but died. In cases of apparently slight bleeding Murphy suggests hemoglobin reading every twelve hours. If drop is continuous operate on suspicion.

Dr. T. B. Noble: One point in abdominal pregnancy has not been mentioned; namely, the products of conception and what should be done with them. Cited two cases diagnosed as fibroid and ovarian cyst. Second case allowed to go to term and delivered a normal child. Mother and child living. A third case diagnosed as acute intestinal obstruction. Woman in extremis. Was able to diagnose abdominal pregnancy with five months living fetus. Condition improved twelve hours later and decided to allow to go to term. Two weeks later woman died suddenly from intra-abdominal hemorrhage. This teaches us that any products of conception outside of uterus should be immediately operated.

Dr. A. S. Jaeger: (1) History of early pregnancy cannot be depended on in too many cases; (2) uterine bleeding present only in some cases; (3) gas anesthesia questionable in some cases of extreme bleeding.

Do not open abdomen in acute tubal conditions. Do colpotomy and drain.

Dr. S. R. Edwards: Experimentation has shown that if the cord is tied off in the abdomen, all the large vessels incident to the abdominal pregnancy will be absorbed thus obviating the necessity of removing them at operation.

Dr. J. H. Eberwein: Cited case of abdominal pregnancy which went to term unknown. Uterus was dilated and infected. Operated and removed 8 pound dead baby. Mother recovered.

Dr. E. E. Padgett, closing: Diagnosis of unruptured ectopic pregnancy easy but we seldom see them at that stage.

Dr. F. C. Walker, closing: Appreciated the discussion and criticism.

Attendance 67. Adjourned.

March 23, 1920

Meeting was called to order by the president, Dr. James H. Taylor. Minutes of previous meeting were read and approved. The application of Dr. Thomas B. Noble, Jr., was read for the first time. The application of Dr. John A. M. Aspy was read for the second time. Drs. Ernest Rupel, Harry H. Heinrichs, Donald L. Miller and Edwin G. Kyte were elected to membership in the society. The secretary gave the train schedule to the A. M. A. meeting at New Orleans and it was decided that all members going should notify the secretary in order to get a special Pullman.

A letter from Dr. G. H. A. Clowes expressing his appreciation of the honorary membership in the society was read by the secretary.

Program: Paper, "Diagnosis of Duodenal Ulcer," Dr. F. W. Foxworthy.

Abstract.—The title of this paper was chosen on account of the criticism made by Moynihan, that it was hard to get good results by treatment on account of the fact that so many poor diagnoses are made. It is impossible to make the diagnosis over the telephone as the author has seen very few typical cases. Too much attention has been paid to the history of the case and not enough to physical examination and the result found by the roentgen ray. The author relies on the history and the physical examination being one-third in value; the roentgen ray one-third, and the chemical findings one-third. A new method of examining the patient is described in which the patient was palpated while lying on the stomach, thereby procuring greater relaxation, and also, gravity assisting by bringing the pylorus nearer the skin. Cases were cited in which a diagnosis of the duodenal ulcer have been made when in reality the patient had intestinal stasis, angulation or gastroptosis. Comments on the various methods quoted from current literature from 1914 to the present time were given. These combined show that various authors have marked differences of opinion as to the proper method of making a correct diagnosis. No attempt to do this should be made until the patient has been put in the hospital for observation and the history and physical examination should be augmented by complete laboratory findings.

Paper, "The Radical Operation for Fistula," Dr. A. T. Custer.

Abstract.—All rectal fistulae begin with an abscess. The result of patients neglect in allowing such abscess to rupture either internally or externally or to tim-

idity on part of operator in failing to incise widely and give sufficient drainage. Patients should be in hospital when asepsis can be strictly observed and patient carefully prepared; the preparation of operator should be the same as for any operation where surgery is indicated. Internal opening not of importance if not found at once as it will be incised in removing branch tracts. Cartilaginous-like lining should be laid open completely in bottom to promote healing. After treatment important, and care should be taken to see that fistula heals from bottom. Tubercular patients should be operated if strong enough to undergo operation, thus removing drain and waste on system and worry from patient's mind. Care must be taken to avoid incontinence. Quinin and urea used locally in conjunction with general anesthesia. Very satisfactory for control of post operative pain.

DISCUSSION

Dr. William Foreman: Diagnosis of the location of an ulcer doubtful unless in presence of obstructive symptoms or enough scar tissue to show with roentgen ray. Pain occurs just as early in duodenal as gastric ulcer. Small difference in treatment. Question of location important on account possibility of cancer. Latter rare in duodenum. Cannot always make diagnosis on (1) history; (2) physical examination; (3) clinical and laboratory tests. History so frequently complicated. Physical examination shows many conditions with symptoms similar to ulcer, that is, appendicitis, cholecystitis, cholelithiasis; cardiac conditions, arteriosclerosis, pulmonary tuberculosis, leukemia, chlorosis; central nervous system conditions as gastric crises, colitis, rectal fissure and diseases of endocrine glands.

Dr. A. B. Graham: Dr. Foxworthy's method of taking history very commendable. Impossible to diagnose some cases of ulcer. There are four classes: (1) With regular pain; (2) with irregular pain; (3) no pain, but nausea and vomiting; (4) hypersecretion. Disagrees with Dr. Custer concerning fistulae. All fistulae do not result from abscess; many follow injury. Must find and eradicate internal opening in order to effect cure. Blind external fistula very rare malady. Mentioned only because internal opening is not found. Hunt for opening at time of examination and not at operation. If necessary to cut both internal and external sphincter, explain to patient before operation the probable results. By injecting milk of magnesia or methylene blue into fistula the fluid will drain through internal opening and it may be easily located. Do not divulge sphincter before inserting probe to locate fistula tract. The most important point is to find the internal opening.

Dr. T. B. Noble: We must hesitate to speak of an absolute diagnosis of this malady, ulcer. It simulates so many other conditions. Personally, there is more to me in the history, in making a guess at ulcer, than in the laboratory examination. The truth is only revealed by the scalpel. In fistula the opening from the mucous membrane is never cured unless brought to the surface by incision. Disposition of fistula of intestinal tract is not to get well. Nature cannot make repairs and thus favors reinfections. First locate internal opening; generally this can be determined by sense of touch.

Dr. F. W. Gregor: Took exception to Dr. Noble's remark that all fistulae must be brought to the surface to be cured. Cited case of woman with fistula, history of syphilis, after provocative arsphenamin

Wassermann ++++ intensive antisyphilitic treatment cured fistula in eight weeks. Has remained cured for three years.

Dr. William H. Foreman: Took exception to Dr. Noble's statement of impossibility of diagnosing ulcer of stomach or duodenum. If brain is properly used a diagnosis can be made. By systematic medicinal treatment and diagnosis cases get symptomatically well even as they do after surgery.

Dr. H. O. Pantzer: Two important points to be noted we must regard as fundamental: (1) A physiological susceptibility, or (2) an anatomical irregularity. Many duodenal ulcer cases complain of stomach trouble for years. Cases occur in relatively early life. Operation for the relief of bands constricting the intestines allow a normal intestinal flow or current to be established.

Dr. A. S. Jaeger: Misconstruction as to term fistulae. The latter must have an opening at each end. Opening at one end only would be a sinus.

Dr. F. W. Foxworthy, closing: Literature on subject of ulcer voluminous. Cardinal symptoms vary with physician. Cited case of pancreatitis diagnosed as ulcer.

Dr. A. T. Custer, closing: Believes 99 per cent. of fistulae are due to abscess. Internal opening must be incised. Cartilaginous lining must be removed to insure healing.

Attendance 75. Adjourned.

L. H. MAXWELL, Secretary-Treasurer.

March 30, 1920

The meeting was called to order by the president, Dr. James H. Taylor. Minutes of previous meeting read and approved.

Dr. J. A. M. Aspy was elected to membership in the society.

Program: Paper—"Epilepsy as a State Problem," Dr. W. C. VanNuys, Superintendent Village for Epileptics, Newcastle, Ind.

Abstract: While the problem of epilepsy, broadly speaking, is social, fundamentally it is a medical problem. At first, epileptics or their friends usually go to physicians for advice. The physician is thus in a position to offer advice in individual cases. The influence of the medical profession is such that it can cause to be carried out a definite state program in regard to the epileptic. In this particular field no other class of citizens can exert so great an influence. Epilepsy was defined as a chronic progressive disorder, characterized by recurrent attacks of impairment or loss of consciousness, with or without convulsions, often accompanied by mental and physical deterioration. The causes are obscure and it is problematical how far many of the supposed causes should be considered coincidental. Epilepsy in the immediate forbears is infrequent, but insanity, feeble-mindedness, epilepsy, alcoholism are commonly found among near relatives. Of greater importance than heredity as to prognosis is the interparoxysmal mental state. Recent investigations tend to show that the prospect of recovery is not materially decreased by the presence of bad heredity in the ancestry. The question of predisposition in epilepsy was reviewed in detail: Certain well recognized traits of confirmed epileptics are: (1) Poverty of ideas; (2) retardation; (3) ego centrism; (4) impairment of judgment; (5) lack of adaptability; (6) lack of insight; (7) circumstantiality; (8) emotional poverty, etc.

The investigations and conclusions of L. Pierce Clark in regard to "Potential Epileptics" were mentioned. Clark believes that many persons who develop epilepsy in later life show certain distinguishing traits from birth or early infancy. Clark believes that a diagnosis of epilepsy after the first grand mal attack is comparable to a diagnosis of tuberculosis after the formation of tuberculosis cavities in the lungs. This view is startling and reveals our responsibility in the matter of diagnosis. The term "Potential Epileptic" was defended, if for no other reason because it indicates the possibility of early diagnosis. The usual organic etiologic factors were mentioned. Many of them may be associated or coincident. Special emphasis was placed on alcohol and syphilis. We do not know the single essential cause of epilepsy nor can the exact mechanism of the epileptic seizure be described. We may believe with the psychoanalysts that so-called organic causes act only through producing conditions of mental stress. We may conclude that many act through producing irritative lesions, themselves capable of producing convulsive phenomena, or that through the accumulation of endogenous or exogenous toxins the same end is reached. For the present, we cannot exclude certain widely separated factors from the etiology. We must admit the possibility of psychogenic, chemotoxic and endocrinopathic factors acting separately or together as possible causes of epilepsy. They may act independently or associated with gross lesions of the brain. However produced, it seems that the epileptic seizure is the final result of a biochemical change in the cortical or subcortical cells. The symptomatic classification (a) grand mal; (b) petit mal; (c) Jacksonian; (d) psychogenic was mentioned in order to bring out certain factors that make the epileptic an undesirable member of the community. Automatism, occurring in the partial grand mal and petit mal forms of epilepsy and the so-called equivalents of the psychic form, together with transitory mental disturbances preceding or following any form of epilepsy, are important from a medicolegal standpoint because of acts that may be committed while in an unconscious state.

The ground was taken that most epileptics are misfits in the community and that the state, recognizing this fact, established the Indiana Village for Epileptics in 1905 for the "scientific treatment, education employment and custody of epileptics." The location and site of the institution were described in detail. There are now accommodations for about 480 male patients. Appropriations for a female group have been made, but because of the high cost of construction at this time, the buildings cannot be completed within the appropriation. A hospital with twenty beds is nearing completion. A medical building with library, laboratory, clinical and postmortem facilities, industrial buildings and a school building are badly needed. It is to be regretted that the general assembly has not seen fit to provide these things. Other facilities are needed to place the institution on the high plane that should be demanded by the medical profession of the state. The influence of the profession was requested to aid the institution in reaching that plane. The earlier recognition of cases of epilepsy was urged as was the recognition of the epileptic as a person possessed of certain traits of character that distinguished him from his fellows. Epileptics should be sent to the Village for Epileptics not as a last resort after everything else has been tried, but as soon as a diagnosis has been made.

DISCUSSION

Dr. Neu: Epileptics subject of distress to all of us. Do not know causation, mechanism or treatment. Both social and medical problem. Causative factors enumerated, incidental rather than real causes. Idiopathic variety (no organic lesion determined) should be separated from other classes. Psychogenic phase, often influenced by change in routine of life. There is something more important than the psychic. Source of danger (socially) from offsprings—psychopathic and neuropathic problem.

Dr. Larue Carter: Potential epilepsy interesting. Often see man over 30 with first attack. Often find clear history of nocturnal attack. Always considered epilepsy disease of childhood; with advance of years have explosive outbursts (comparable to malaria). Any focus of infection may have certain influence. Must be sure to watch intestinal tract.

Dr. H. O. Pantzer: With due regard to prevalent opinion I must disagree. We meet epileptics as hopeless cases. Bad for therapy. Cited case woman with history of nocturnal attacks. Saw her in first day attack. Removal of both turbinates by Dr. Woolen. No more attacks. Second case—with submerged tonsils and cervical adenitis—tonsillectomy relieved symptoms. No more epileptic attacks. Too much bromids and not enough encouragement.

Dr. F. B. Wynn: We are pessimistic because treatment avails nothing. Psychogenic or neuropathic soil. We all have a neuropathic soil for something. Mental attitude of patient has something to do with attack. Change of environment, new people a great help to epileptics. Necessity of differentiating as between idiopathic and epilepsy due possibly to other causes. Do not give up hope; let us get to work and diagnose cases early for proper treatment.

Dr. C. C. Campbell: Spoke of training camps and cases of men having seizures of some kind. Diagnosed as epilepsy, unfortunately. Use as a doge for evading service. Diagnosis was made too soon.

Dr. C. R. Sowder: Problem as to what to do with epilepsy. Appreciation of Dr. VanNuys' visit and his report of what is being done.

Dr. A. Schweitzer: Point to be emphasized. Difficulty of getting adequate help for institutions.

Mr. Foster (Social Service): At the present time there is no room for the inefficient, therefore the epileptic at a great disadvantage. The social worker has had difficulty in getting diagnosis and treatment. Consequently cannot hold man or position.

Dr. VanNuys: Does not believe in bromids as routine. Only in occasional cases. Luminol and sodium luminol seems to be giving some remarkable results.

Dr. Wynn: Motion that Dr. VanNuys be thanked for his most excellent address. The president thanked Dr. VanNuys for the society.

Meeting adjourned. Attendance 60.

Meeting of April 6 was called to order by the president, Dr. James H. Taylor. The minutes of the previous meeting were read and approved. The applications of Drs. R. F. Banister, Charles A. Weller and R. J. D. Peters were read and referred to the Council. Dr. Charles R. Sowder moved that the Council be instructed to find available quarters for the society meetings and report in two weeks. Seconded by Dr. Noble. Motion carried.

Program: Case Report.—Case 1, boy knocked by auto; wheels passed over upper abdomen; no external injury. Condition of shock. After doing well

for two days, collapsed while sitting up in a chair. Laparotomy revealed ruptured liver. Packed with gauze. Same removed on eighth day and patient discharged on twenty-third day. Two points to be noted: (1) Absence of shock in presence of hemorrhage; (2) uneventful recovery. Case 2, onset with pain in abdomen, nausea and vomiting. Mass in right lower abdomen. White blood count, 26,000. Laparotomy showed gangrenous appendix and abscess; patient in good condition for ten days when septic temperature curve was again manifested; reopened on fourteenth day. No abscess found; on eighteenth day extreme pain in left chest; temperature, 104; purulent sputum. Right sided pneumonia; postmortem showed a 3 cm. opening in diaphragm and also one into bronchus; abscess between liver and diaphragm. Case 3, mass found in midline of lower abdominal wall. Tender, fluctuating, red and swollen; opened and drained abscess; no connection with peritoneal cavity; prompt convalescence. Seven weeks later another mass in same region. Incised and drained. Obtained a pure culture of micrococcus catarrhalis from abscess fluid.

Dr. Max A. Bahr: Case Report—Presentation of an extensive gumma of brain.

Abstract: Dr. Bahr gave a very interesting and complete report of a case of "Extensive Gumma of the Brain." The symptoms were entirely left sided. Convulsions for past five years confined to left side of body and typically Jacksonian. Blood Wassermann. Spinal fluid Wassermann, positive globulin, 12 cells per c.c. Patient found dead in bed after normal work previous day. On necropsy a tumor mass of right hemisphere extending from anterior tip frontal lobe to junction anteriorly $\frac{2}{3}$ and posteriorly $\frac{1}{3}$ occipital lobe and from level third temporal convolution to width 1 cm. of longitudinal fissure. Microscopic section showed tumor to be a gumma; also found gumma of right adrenal and gummatous changes in pituitary. Cerebral arteriosclerosis; chronic sinusitis, ethmoid, sphenoid and tumor of right middle ear and mastoid (extension). Gross specimen with microscopic sections were presented.

Dr. P. E. McGown: Case Report—Papillomatous Epithelioma of Kidney Pelvis. A very rare condition. Ten American and thirty-seven foreign cases. Woman of 58 with negative family history. Hematuria in 1917 and 1918; tenderness of right kidney; headache; albumen, pus and blood in urine; cystoscopy showed good flow from ureters. Papilloma just inside ureteral opening; P. S. P. test shows right kidney exerting one-third normal. Tumor suspected; right kidney and 4 inches of ureter removed. Tumor found in kidney pelvis and ureter. Microscopic section of tumor showed it to be a papilloma. Good convalescence for three months. Then hematuria recurred and cystoscopy revealed papilloma at both right and left ureteral orifices. Removed by fulguration. Later right ureter entirely removed with good recovery. Papilloma of bladder potentially malignant. Hematuria most frequent symptoms.

Dr. C. H. McCaskey: Case Report—Sphenoidal Sinusitis with Brain Abscess. History negative; complained of left frontal and postauricular pain; transillumination of sinuses negative; pressure symptoms negative. Spinal fluid negative. Radiogram negative except antrum of left mastoid. Left tympanum bulging and red. Incision relieved. Later pain in neck. After roentgen ray left mastoid was operated. Pain

in neck and twitching persisted. Slight amount of blood in sputum. Neck incised in five places and drained. On thirty-ninth day exophthalmos and swelling of right side of face; fifty-seventh day complete exhaustion; died fifty-eighth day. Case reported because there was no diagnosis of sphenoidal sinusitis. It well to remember that there may be no definite symptoms of this trouble.

Dr. C. F. Neu: Report of necropsy—Grossly brain showed nothing; cavity negative; pus about pituitary body and necrosis of underlying bone. Necrosis throughout sphenoidal sinus and into ethmoid.

DISCUSSION

Dr. Amos: Gave some further statistics on case reported by Dr. McCaskey. Suspected meningeal trouble; history only slight, acute "colds." Morphine necessary for pain.

Dr. D. O. Kearby: Emphasized absence of sinus symptoms. No anterior or posterior drainage.

Dr. E. N. Kime: Incidence of undiagnosed sphenoidal sinusitis very great. In series of influenzal cases 79 per cent. showed this condition undiagnosed. Subphrenic abscess may be extraperitoneal or intraperitoneal. The former are generally tuberculous, the latter from adjacent organs. Mortality in the former 40 per cent.

Adjourned. Attendance 77.

The meeting of April 13 was called to order by the president, Dr. James H. Taylor. Minutes of previous meeting were read and approved. Drs. R. F. Banister, R. D. J. Peters and Charles A. Weller were elected to membership in the society. The secretary read a letter from the Harvard Medical School calling attention to the summer school term for 1920.

Program: "Puerperal Sepsis," Dr. G. E. Jackson.

Abstract: The subject was considered from the standpoint of its sociologic relation. One-half of deaths from childbirth are due to infections; one-half at least of these are preventable "wound infections." Profession and laity need education as to the importance of parturition. Preventable causes are: Exposure to infectious diseases, tub baths, vaginal douches, vaginal examinations, without proper precautions and sterile rubber gloves. Diagnosis should include bacteriologic investigation of lochia and blood demonstration of wound infection. Prognosis: mortality of bacteremic cases, 33 per cent., others, 8 per cent. Streptococcus hemolyticus very bad; gonococcus good, regardless of clinical picture. Treatment: Middle course between the ultra conservative and the extremely radical schools. Citation of recent case with streptococemia which demanded weeks of conservative medical care followed by laparotomy. Writer introduces rubber tube and instills 50 per cent. alcohol into uterus for "primary sterilization" and adequate drainage.

"Acute Appendicitis," Dr. R. C. Ottinger.

Abstract: The purpose of presenting paper is to emphasize importance of early diagnosis and surgical intervention, the care and after treatment of acute appendicitis. Etiologic factor of first importance partial or complete obliteration of lumen of appendix plus micro-organism. External trauma rarely factor. Pathologic anatomy varied. In early appendicitis only mucosa involved, later all coats with gangrene, rupture, abscess or general peritonitis. Localized abscess may be anywhere in abdomen. First symptom acute abdominal pain, followed by nausea and vomiting. Usually localized R. L. Q., may localize around um-

bilicus or in left side. Temperature rises and have leukocytosis generally. Cessation of pain usually lull before storm. After few hours symptoms much worse. Primary nausea due to distention of appendix. Persistent nausea due to peritoneal invasion. Differential diagnosis not always easy in acute appendicitis. Gallbladder, gastric and duodenal ulcer, acute pancreatitis, typhoid perforation, renal calculus and adnexa disease to be remembered. Appendicitis a surgical disease and cured only by surgery. Every case should be operated at once. Some cases seen so late that operation is contraindicated. Fowler position. Salt, soda or glucose solution by proctoclysis hypodermoclysis or intravenously, morphia and nothing by mouth sometimes tides these cases over. Cases which are operated early and have free seropurulent fluid in abdomen should be treated as just outlined. McBurney incision preferable except in cases suspected of other acute pathology. Postoperative complications relatively frequent. Intestinal obstruction, pelvic subphrenic or hepatic abscess and fecal fistula. Mortality rate mounts rapidly for each day of delay. McWilliams reports 6 per cent. second day, 7 per cent. third day, 18 per cent. fourth day, 14 per cent. fifth and sixth days. Camp Custer report of 330 cases with eighth deaths or 2.4 per cent.

Conclusions: Essentials in care of this disease are as follows: (1) Early diagnosis; (2) early operation; (3) lastly, proper after treatment, which means in severe cases plenty drainage. Fowler position, salt, soda, or glucose, either Murphy method or other methods.

"Course of Chronic Ascending Pelvic Infections," Dr. Carl Habich.

Abstract: Chronic endocervicitis is a distinct clinical entity and presents the most frequently encountered objective pathology of the whole gynecologic system. Sturmdorf has very aptly called the cervix the tonsil of the uterus, as it serves when infected as a permanent focus of serious potentialities. Above and below the internal os of the uterus we find a very striking physiologic, anatomic and pathologic contrast. The cervical canal is merely a passive passageway between the vaginal vault and the uterine cavity, and the cervical mucosa is highly susceptible to infection. On the other hand, the corporeal endometrium seldom shows evidence of chronic inflammatory change, in spite of the fact that invading organisms are constantly traveling over the surface of the corporeal endometrium in their course from the cervix to the tubes. The infrequency of chronic inflammation of the corporeal endometrium is shown by the work of Kelly, Graves, Curtis, Barbour and Watson, Norris and others. If this is true why is the corporeal endometrium immune to infection? The attempted explanations are many and varied but none of the older ideas thoroughly and satisfactorily explain this immunity. The suggestion is offered, following the work of Dr. Arnold Sturmdorf of New York, that these infections do not travel by continuity over the surface of the endometrium, but travel by way of the lymph channels of which the uterus and appendages have a generous supply, as an ascending lymphangitis. This theory would explain many of the cases of amenorrhea, dysmenorrhea, menorrhagia and metrorrhagia which we have heretofore attributed to chronic endometritis. These conditions are merely functional symptoms of endocrine distortion. The so-called chronic polypoid glandular endometritis is not inflammatory in character but is an adenomatous overgrowth

analogous to the thyroid in Graves' disease. Recognizing chronic endocervicitis as a primary focus of infection and its extension as an ascending lymphangitis, places it, in accord with our modern conception of bacterial invasion, on a rational parallel with any other infectious process.

DISCUSSION

Dr. Louis Burckhardt: The death rate of women following labor and the decrease in the birth rate shows us that we must exercise more care. Frequent vaginal examinations unwarranted and cause trouble. Rectal examinations and rectal temperatures advised. Judge patients' conditions by character of pulse. The hospital is the ideal place for these cases.

Dr. J. H. Eberwein: In puerperal sepsis institute drainage with least possible traumatism. Acute appendicitis may be hematogenous or lymphogenous in origin. Also have Rosenau theory of selective tissue affinity. The enlarged appendix tip is caused by stricture. Typical appendiceal disease easy to diagnose. Some cases, on account of symptoms, simulating other conditions very difficult. Be careful to drain all pockets of infection resulting from appendicitis.

Dr. F. E. Abbett: Has seen many cases of puerperal sepsis and varied treatments. Conservatism (time, patience, quinin and whisky) seem best. Mentioned a case of puerperal sepsis which was operated two years afterward for appendicitis. Examination of the perimetrium at that time showed no evidence of the previous sepsis. Thought terms endocervicitis and endometritis not good. Should be included under metritis. Beginning of metritis may easily date from childhood as a result of improper care. The endometrium can be infected and the infection in turn be carried by lymph or blood to the uterine appendages.

Dr. A. S. Jaeger: Distinction should be made between puerperal fever and puerperal sepsis. All cases not sepsis. Some cases due to absorption of serum, toxoids and lochia. Do not believe in douches postpartum. Always use gloves for examination. Pulse should be our guide as to conditions. Rectal temperature in abdominal conditions most valuable.

Dr. H. O. Pantzer: Morbidity of puerperium often antedates conception. We have good reports from men using gauze saturated with alcohol as uterine packing. Absence of endometritis corporis may be accounted for by the physiological fact of menstruation. The possibility of infections being carried by lymph channels to other organs is inconceivable.

Dr. O. G. Pfaff: Use of electrargol warranted in selected cases of puerperal sepsis. Several cases which recovered with this treatment would doubtless have died. All that is necessary to know concerning appendicitis is an early diagnosis and operation. We must get cases earlier in order to do the best for our patients. There is food for thought in the lymph carrying theory of infections of the adnexa following endocervicitis.

Dr. T. B. Noble: Dr. Ottinger's paper, while treating a very common condition, is nevertheless valuable and timely. Twenty-five years ago in this society I said that appendicitis was a surgical disease and was ridiculed for my statement. Today I say that appendicitis is at some stage a curable disease. Appendicitis is a gospel which we must preach to each succeeding generation.

Dr. G. B. Jackson, closing: Interference is the worst possible thing in obstetrics. This is a surgical procedure and is worthy of the most perfect asepsis.

Dr. R. Ottinger, closing: Hematogenous infection of appendix is possible but greater majority come from bowel. Constipation does not regularly follow appendicitis.

Dr. C. Habich, closing: Polypoid endometritis does exist but it is not inflammatory. It is of endocrine origin. Deaver now contends that chronic pancreatitis is result of ascending infection from gallbladder by way of the lymph stream.

Adjourned. Attendance 82.

The meeting of April 20 was called to order by the president, Dr. James H. Taylor. The reading of the minutes was dispensed with by society vote. The application of Dr. Thomas B. Noble, Jr., was read for the second time and referred to the Council. Applications of Drs. R. A. Solomon and B. M. Gundelfinger were read for the first time. Report of the Council on available quarters for society meetings was presented. The president gave some data concerning a piece of property on Michigan between Pennsylvania and Meridian which could be purchased. Dr. Oliver thought material was too expensive to consider building at this time. He suggested a sinking fund, same to be used when the times were more auspicious. Dr. Wynn reviewed the numerous efforts made in the past to plan a home for the society. Dr. Cregor and Dr. Noble also spoke on the question, Dr. Noble emphasizing the fact that the society was indifferent and had made no advance in years, partially on account of a lack of permanent quarters. By society vote the Council Committee was continued with instructions to report again in two weeks.

Program: "Dr. Aesculapius and Some Other Doctors," Dr. J. N. Hurty.

Abstract: Lantern pictures of four famous statues of Dr. Aesculapius were shown. The first is in the museum at Athens, the second in the museum at Rome, the third in the museum of Berlin and the fourth in the museum at Paris. He also showed two pictures of Hippocrates from different sources, pictures of Galen, Paracelsus, Ambroise Paré, William Harvey, Boerhaave, John Hunter, Joseph Priestly, Edward Jenner, Laënnec, Crawford Williamson Long, William T. Morton and Dr. Horace Wells. Short biographical sketches with analytical notes were given with each picture. The wonderful accomplishments of William Hunter and Ambroise Paré in surgery were rapidly gone over, the more important being emphasized. In connection with the pictures of Long, Morton and Wells were given illustrations of the first application of nitrous oxid gas for tooth extraction, also the first public exhibition of ether in the Massachusetts General Hospital, Oct. 16, 1846. A slide from one of the latest photographs of Dr. Osler was shown with a brief biography. In addition to the portraits stated above were shown ex-Surgeon-General Gorgas and Dr. Carlos Finley, who first suggested the idea that the infection of yellow fever was carried by mosquitos, a picture of Walter Reed, Trudeau, Nicholas Senn, Alexis Carrel, John B. Murphy and Wassermann. This series was followed by a series of pictures with brief biographies of the earlier date physicians of Indiana. Among the portraits shown were William H. Wishard, who died at the age of 97; Robert Todd, George W. Mears, Dr. Joseph Eastman, Dr. W. B. Fletcher, Dr. Joseph Marsee, Dr. Theophilus Parvin, Dr. Thomas B. Harvey, Dr. William Bobbs, Dr. Theodore Potter, Dr. John Kitchen and Dr. George Cook. This series was followed by

fourteen pictures of old wood cuts showing the surgery of ancient days. The last of these showed a Greek army surgeon dressing the wounds of a soldier, a very old and interesting illustration.

Meeting adjourned. Attendance 78.

The meeting of April 27 was called to order by the president, Dr. James H. Taylor. Minutes of the previous meeting were read and approved. Dr. Thomas B. Noble, Jr., was elected to membership in the society.

Program: Paper—"Anomalies of the Bile Ducts and Blood Vessels as Related to the Performance of Cholecystectomy," Dr. H. K. Bonn.

Abstract: The essayist described and illustrated by lantern slides the various anomalies of the cystic and hepatic ducts, the cystic and hepatic arteries and branches thereof. Likewise the varying relationships between cystic and hepatic ducts and hepatic artery and portal vein were described and illustrated, when anomalies existed. The conclusions formed from a study of bile duct and blood vessel anomalies were as follows:

1. Ignorance of these anomalies or failure to appreciate their importance makes for carelessness in removing the gallbladder.
2. When a vessel of anomalous origin is severed, alarming hemorrhage may ensue, due to the fact that this type of hemorrhage is difficult of control because the vessel retracts markedly.
3. When the vessel retracts and vicious bleeding continues, one is prone to make prompt and perhaps too hasty efforts to control the hemorrhage from the depth of the operative field. These hasty blind attempts at controlling the bleeding frequently result in the inclusion of a portion of the wall of the ducts, portal vein or hepatic artery, in the grasp of a clamp or a ligature.
4. As a result of disease, the operative field landmarks are masked, thus rendering a duct or vessel injury easy of production.

Paper—"Salpingitis with Special Reference to Causation," Dr. A. S. Jaeger.

Abstract: The last word has not yet been said as to the causation of salpingitis and in view of the importance of the fallopian tube in relation to reproduction, and the important pathologic changes occurring in the tube itself, and to adjacent structures, as well as indirect systemic involvement, is the writer's excuse for reviewing the subject. Salpingitis has been seen primarily in young children and in women long past the menopause. While textbooks do not usually lay much stress on it, he thinks that there are many predisposing causes which directly or indirectly play an important part in the causation of actual tubal inflammation. As the exanthemata of childhood, especially mumps, tonsillitis, etc., the illy defined conditions associated with puberty, etc.; nonsymptomatic retrodeviations; anatomic deviations, pressure from tumors, adhesions, etc. He is convinced from a careful examination of 214 women, with a total of 132 cases of salpingitis, of whom 50 showed gonococci, and a careful analysis of their case histories, that there were sufficient predisposing or even actual possible causes, to make it questionable in his mind whether we are justified in still considering the vast majority of cases of salpingitis, as due solely to gonorrheal infection. He believes that secondary tubal infection from primary focal infection elsewhere, plays an important part in the production

of salpingitis, though he does not wish to be understood as claiming that gonococcal infection is not responsible for a fair percentage of tubal infection, for this is shown by his own case records, but does feel that the gonococci alone and unaided would not cause the pathologic damage in the tube for which it is given credit. He also believes that the commonly accepted opinion is the result of still following the old statistics and precepts, and thinks that if those entitled by experience and ability would take the trouble to revise their statistics, a different opinion would soon prevail.

DISCUSSION

Dr. Goethe Link: Dr. Bonn's paper very important, interesting and timely. Dr. William Mayo uses small eye knife to puncture common duct in order to be sure he has found portal vein. Large amount of swelling makes it difficult to identify parts. Relative location of structures necessary on account of frequent involvement of common duct. Unable to diagnose without exploration of duct. Location of blood vessels not so important. Make large incision so field can be seen. The etiology of salpingitis has long been known as specific. In early infection the gonococcus is present in pure culture. In chronic cases gonococcus disappears and we have a mixed infection. Gonorrheal tubes not as common as formerly on account of better treatment for both sexes.

Dr. H. O. Pantzer: Dr. Jaeger's paper of great interest. The facts will be proven true by further scientific investigation. Anatomic derangements give rise to physiologic disturbances. The gonorrheal theory as the sole cause of salpingitis must be discarded. The passing of the gonorrheal infection from the vagina to the fallopian tube is a very slow process. The receptivity to this infection is greatest immediately after menstruation and again the fourteenth to sixteenth day following. After a gonorrheal salpingitis sterility obtains, while a normal tube is present after a streptococcal infection. Malformations predispose to disease.

Dr. M. N. Hadley: The tubes may just as well become infected from foci elsewhere, even as appendices and gallbladders; by analogy the theory has something to stand on.

Dr. G. B. Jackson: Dr. Bonn gave an excellent presentation. Dr. Jaeger mentioned many interesting points but it is not possible to acknowledge the innocence of the gonococcus in these cases. Most genito-urinary diseases of women occur after puberty and following coitus. The exanthemata of childhood have spent themselves before these infections occur, therefore not an etiologic factor. Theory of foci of infection origin not tenable. Hill has shown the gonococcus the predominating organism in 98 per cent. of cases. Most salpingitis cases are genital in origin but of course not all are gonorrheal. With exception of tuberculous cases practically all of these infections occur after coitus.

Dr. Kime: Usual criterion of gonococcus is morphologic one. In chronic gonorrheal infections we have extremely few intracellular diplococci. A great difference is found in morphology of the gonococcus and authorities differ as to identifications. We cannot be certain that Dr. Jaeger's cases did not contain the Neisser organism.

Dr. Bonn, closing: I think Dr. Hadley misunderstood my statement. I did not advocate beginning

in every case with the cystic duct. It depends on conditions present.

Dr. Jaeger, closing: I do not mean to say that no salpingitis is due to gonorrhea. However, there must be some connection with other infections to be found in the body.

Meeting adjourned. Attendance 70.

L. H. MAXWELL, Secretary.

JOHNSON COUNTY

The Johnson County Medical Society met at the Public Library, Franklin, on May 12.

Minutes of the preceding meeting read and approved, and the following items of business considered:

Discussion of summer picnic and postponement of date.

Dr. Henry Noble Sherwood, dean of Franklin College, was elected to associate membership in the society.

Dr. James A. Craig of Greenwood, member of the Seventy-First Indiana Legislature, was unanimously requested to present a paper to the state committee for the program of the annual meeting at South Bend.

Dean Sherwood, of Franklin College, addressed the society on the subject "Three Things That Threaten Our American Institutions—Selfishness, Disrespect for Law and Order, and un-Americanism." The subject was presented in a forceful, logical manner, and conveyed an abundance of truth and information.

Adjourned. LUKE P. V. WILLIAMS, Secretary.

MONTGOMERY COUNTY

The Montgomery County Medical Society met May 18 at the Crawford House, Crawfordsville. Society was called to order by the president, Dr. W. F. Batman.

Dr. Batman introduced Dr. E. R. LeCount of Chicago, who delivered a very interesting lecture on "Fractures of the Skull." With the aid of a blackboard he gave a detailed description of the mechanism of those fractures and explained why they most often appear in certain locations. An informal discussion followed the lecture.

After the lecture the doctors enjoyed a dinner served by the Crawford House.

An excellent after-dinner speech was delivered by Professor Richards of Wabash College in which he paid a glowing tribute to the medical profession and advocated a more thorough teaching of physiology and hygiene in the public schools to the end that the coming generation may better know how to prevent disease.

Adjourned. A. L. LOOP, Secretary-Treasurer.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1920, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

BARBITAL-CHIRIS.—A brand of barbitol (see New and Nonofficial Remedies, 1920, p. 82) complying with the N. N. R. standards. Antoine Chiris Co., New York.

BARBITAL SODIUM-CHIRIS.—A brand of barbitol sodium (see New and Nonofficial Remedies, 1920, p. 83) complying with the N. N. R. standards. Antoine Chiris Co., New York.

CONDENSED VITALATE.—A pure culture of *Bacillus bulgaricus*. It is designed for internal administration (see general article, Lactic Acid-Producing Organisms and Preparations, New and Nonofficial Remedies, 1920, p. 156). The preparation is distributed by the manufacturer only. Vitalate Laboratories of California, Pasadena, Calif. (*Jour. A. M. A.*, April 3, 1920, p. 851).

ELIXIR BARBITAL SODIUM-ABBOTT.—Each fluidounce contains barbitol sodium-Abbott (see New and Nonofficial Remedies, 1920, p. 84), 20 grains. Abbott Laboratories, Chicago.

AROMATIC CHLORAZENE POWDER.—A powder composed of Chlorazene (see New and Nonofficial Remedies, 1920, p. 137), 5 per cent.; sodium bicarbonate, 5 per cent.; eucalyptol, 2 per cent.; saccharin, 1 per cent.; and sodium chloride, 87 per cent. Abbott Laboratories, Chicago.

CAPSULES CORPORA LUTEA DESICCATED-HOLLISTER-WILSON 2 GRAINS.—Each capsule contains desiccated corpus luteum-Hollister-Wilson (see New and Nonofficial Remedies, 1920, p. 204), 2 grains.

CAPSULES CORPORA LUTEA DESICCATED-HOLLISTER-WILSON 5 GRAINS.—Each capsule contains desiccated corpus luteum-Hollister-Wilson (see New and Nonofficial Remedies, 1920, p. 204), 5 grains.

TABLETS CORPUS LUTEUM DESICCATED-HOLLISTER-WILSON 2 GRAINS.—Each tablet contains desiccated corpus luteum-Hollister-Wilson (see New and Nonofficial Remedies, 1920, p. 204), 2 grains.

TABLETS CORPUS LUTEUM DESICCATED-HOLLISTER-WILSON 5 GRAINS.—Each tablet contains desiccated corpus luteum-Hollister-Wilson (see New and Nonofficial Remedies, 1920, p. 204), 5 grains. The Hollister-Wilson Laboratories, Chicago.

SCHICK TEST-GILLILAND.—Marketed in packages containing a capillary tube of diphtheria toxin (standardized) and in vial of diluent, and in packages containing four tubes of diphtheria toxin and four vials of diluent. See Diphtheria Immunity Test (Schick Test), New and Nonofficial Remedies, 1920, p. 304. Gilliland Laboratories, Ambler, Pa.

CORPORA LUTEA SOLUBLE EXTRACT-HOLLISTER-WILSON.—A sterile solution of those constituents of corpus luteum which are soluble in physiological solution of sodium chloride, containing in each Cc. 0.02 Gm. of soluble matter in addition to sodium chloride and chlorbutanol (as a preservative). For a discussion of actions and uses, see general article on Ovary, New and Nonofficial Remedies, 1920, p. 201. It is marketed in the form of Ampoules Corpora Lutea Soluble Extract-Hollister-Wilson 1 Cc., Hollister-Wilson Laboratories, Chicago.

EUCATROPINE.—Euphthalmine. Phenyl - Glycolyl-Methyl-Vinyl-Diacetonalkamine Hydrochloride. Eucatropine was first introduced as Euphthalmine. It produces prompt mydriasis, free from anesthetic action, pain, corneal irritation, or increase in intra-ocular tension. The effect on accommodation is slight and transient. Eucatropine is useful as an aid in ophthalmoscopic examinations in place of atropin, homatropine, etc.

EUCATROPINE-WERNER.—A brand of eucatropine complying with the N. N. R. standards. Werner Drug and Chemical Company, Cincinnati, Ohio (*Jour. A. M. A.*, May 1, 1920, p. 1231).

PITUITOL OBSTETRICAL.—Pituitary Extract Obstetrical-Hollister-Wilson. An extract of the posterior lobe of the pituitary body of cattle, approximately three times the strength of Solution of Hypophysis, U. S. P., preserved by the addition of chlorbutanol. It is standardized according to the method of G. B. Roth. For actions and uses, see general article, Pituitary Gland, New and Nonofficial Remedies, 1920, p. 205. Marketed in the form of Ampoules Pituitol Obstetrical 0.5 Cc. and Ampoules Pituitol Obstetrical 1 Cc. Hollister-Wilson Laboratories, Chicago.

PITUITOL SURGICAL.—Pituitary Extract Surgical-Hollister-Wilson. An extract of the posterior lobe of the pituitary body of cattle, approximately six times the strength of Solution of Hypophysis, U. S. P., preserved by the addition of chlorbutanol. It is standardized according to the method of G. B. Roth. For actions and uses, see general article, Pituitary Gland, New and Nonofficial Remedies, 1920, p. 205. Marketed in the form of Ampoules Pituitol Surgical 1 Cc. Hollister-Wilson Laboratories, Chicago.

RADIUM BROMIDE, RADIO CHEMICAL CORP.—Supplied in the form of a mixture of radium bromide and barium bromide. All deliveries are made subject to the tests of the U. S. Bureau of Standards. Radio Chemical Corporation, New York.

RADIUM CARBONATE, RADIO CHEMICAL CORP.—Supplied in the form of a mixture of radium carbonate and barium carbonate. All deliveries are made subject to the tests of the U. S. Bureau of Standards. Radio Chemical Corporation, New York.

RADIUM CHLORIDE, RADIO CHEMICAL CORP.—Supplied in the form of a mixture of radium chloride and barium chloride. All deliveries are made subject to the tests of the U. S. Bureau of Standards. Radio Chemical Corporation, New York.

RADIUM SULPHATE, RADIO CHEMICAL CORP.—Supplied in the form of a mixture of radium sulphate and barium sulphate. All deliveries are made subject to the tests of the U. S. Bureau of Standards. Radio Chemical Corporation, New York (*Jour. A. M. A.*, May 8, 1920, p. 1316).

ACETYL-SALICYLIC ACID-HEYDEN.—A brand of acetyl-salicylic acid (see New and Nonofficial Remedies, 1920, p. 247) complying with the N. N. R. standards. Heyden Chemical Works, Garfield, N. J. (*Jour. A. M. A.*, May 22, 1920, p. 1457).

STREPTOCOCCUS VACCINE (GILLILAND).—A streptococcus vaccine (see New and Nonofficial Remedies, 1920, p. 290) made from hemolytic streptococci, viridans (green-producing) streptococci and nonhemolytic streptococci. Marketed in packages of four syringes in packages of four 1 Cc. ampules and also in vials of 5, 10 and 20 Cc. The Gilliland Laboratories, Ambler, Pa.

TABLETS DICHLORAMINE-T, 4.6 GRAINS.—Each tablet contains 4.6 grains of dichloramine-T-Abbott (see New and Nonofficial Remedies, 1920, p. 139). Abbott Laboratories, Chicago.

SOLUTION ARSPHENAMINE-LOWY.—An aqueous 0.5 per cent. solution of arspenamine possessing the proper degree of alkalinity. It is supplied in ampules containing 80 Cc. and 120 Cc., respectively, each being provided with a hypodermic needle and attachment for intravenous administration. The ampules are provided with an expiration date after which time they

should not be used, and with a color standard to which they must conform. The solution is made from the particular brand of arsphenamine selected by the purchaser. Lowy Laboratory, Inc., Newark, N. J. (*Jour. A. M. A.*, May 29, 1920, p. 1519).

PROPAGANDA FOR REFORM

DETERIORATION OF OUABAIN (CRYSTALLINE STROPHANTHIN) SOLUTIONS.—Levy and Cullen, having observed wider variation in the potency of several lots of ouabain furnished in ampules, found that the sterilized solutions were decidedly alkaline in reaction, whereas freshly prepared aqueous solutions of the drug were neutral or slightly acid. Since ouabain (crystallized strophanthin) is readily rendered biologically inert by heating with alkali, the authors ascribe the deterioration of the solutions to alkali derived from the soft glass from which ampules are often made. The deterioration may be averted by the use of containers of hard glass (*Jour. A. M. A.*, April 3, 1920, p. 955).

ANTI-TUBERCULOUS LYMPH COMPOUND (SWEENEY).—This is put out by the National Laboratories of Pittsburgh, Dr. Gilliford B. Sweeney, "Medical Director." Just how Anti-Tuberculous Lymph Compound is made today is not stated. It is fair to assume that it is not made in such a manner as to bring it under the federal laws governing the sale of serums and similar preparations. The claims made for the preparation are uncritical and unscientific, mainly of the testimonial class. When some of these testimonials were investigated, every physician who answered the inquiry regarding his previous and present opinion declared in effect that he had long since ceased to have faith in the value of the preparation. The facts are that no serum or lymph has thus far been proved to have any value in the treatment of tuberculosis. Having examined the available evidence, the Council on Pharmacy and Chemistry declared Anti-Tuberculous Lymph Compound (Sweeney) not acceptable for New and Nonofficial Remedies (*Jour. A. M. A.*, April 3, 1920, p. 965).

ANTI-SYPHILITIC LYMPH COMPOUND (SWEENEY).—This preparation is made by or under the direction of Dr. Gilliford B. Sweeney, whose researches (?) led to the production of Anti-Tuberculous Lymph Compound (Sweeney). According to the available information, this preparation is made by suspending benzoate of mercury in lymph from the bullock. The circular exploiting this preparation makes the statement that it is seldom necessary to continue the treatment beyond two months. If one chooses to be credulous, this would indicate extraordinary power for the mercury. That any physician could be induced to place his trust in this preparation is almost unthinkable. The Council on Pharmacy and Chemistry declared Anti-Syphilitic Lymph Compound (Sweeney) not acceptable for New and Nonofficial Remedies (*Jour. A. M. A.*, April 3, 1920, p. 966).

PHARMACEUTICAL HOUSES AND THE COUNCIL ON PHARMACY AND CHEMISTRY.—In no one direction has the Council made greater efforts than in its endeavors to secure the fullest cooperation of the various pharmaceutical houses. The difficulty has been, and always must be, the fundamental antagonism between objectives that are largely commercial, on the one hand, and purely scientific, on the other. Nevertheless, the Council has always believed that there is a possible middle ground wherein the interests of therapeutics would not be injured, but would go hand in hand with commercial development based on enlightened self-interest. The Council has practically the undivided support of manufacturers of medicinal chemicals; but pharmaceutical firms which find it profitable to promote specialties—unscientific or ordinary mixtures of pharmaceutical or biologic products sold under trade names—have not supported the Council. The methods of the

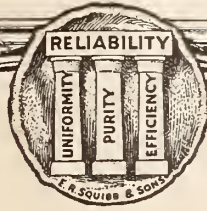
pseudochemical companies, whose sales propaganda in the interests of unscientific nostrums with its attending damage to scientific medicine had led to the establishment of the Council, has found their lodgment in most of the pharmaceutical houses. Is it any wonder that such firms are antagonistic to the work of the Council? When the medical profession as a unit will support the Council in its work, then such firms will find it good business policy to market products which are eligible for New and Nonofficial Remedies, but not before. The Council, constituted of scientific men working without remuneration in the interest of scientific medicine and the medical profession, expects—and rightfully—the cooperation and support of the members of that profession. What is needed is the active, sympathetic cooperation of physicians; the cooperation of pharmaceutical houses will follow as a matter of course (*Jour. A. M. A.*, May 1, 1920, p. 1234).

SOME MISBRANDED DRUG PRODUCTS AND NOSTRUMS.—The following products have been subject to prosecution by the federal authorities under the Food and Drug Act: Quinin Sulphate Tablets and Calomel Tablets of the Drug Products Company, New York City, did not contain the amount of drug claimed. Acetphenetidin and Salol Tablets of the Carrol Dunham Smith Pharmacal Co., New York City, did not contain the amount of drugs claimed. Hostetley's Hypophosphites and Hostetley's Chemically Pure Hypophosphites were adulterated and misbranded. Stoddard's Pinus-Codeia, Salcetol-Codeia Tablets, Salcetol Phenylamine Ammonii Salicylate Tablets, Salcetol Co. No. 2 Infant Corrective Tablets, Cannabin Co. Tablets, G. S. Stoddard & Co., New York City, were misbranded. Dr. King's Star Crown Brand Pills were sold under false therapeutic claims. Marshall's Pain Drops, Marshall's Lung Syrup, Dr. J. C. Brown's Unequaled Liquid Drops, Marshall's Blood and Liver Pills, Egyptian Oil, and Arctic Oil Liniment of the M. W. Marshall Medicine Co. were sold under false therapeutic claims (*Jour. A. M. A.*, May 1, 1920, p. 1269).

MORE MISBRANDED NOSTRUMS.—The following "patent" medicines have been the subject of prosecution by the federal authorities because they were sold under false claims: Seelye's Ner-Vena, a syrup containing alcohol and vegetable extractives, among which were those of juniper, wild cherry, senna, gentian, sassafras, uva ursi and cinchona; Hill's Rheumatic Pills, consisting of vegetable extracts, including aloes, and 5 per cent. of mineral salts; Jenkin's Rheumatism, Gout and Neuralgia Annihilator, containing over 46 per cent. alcohol, salicylic acid, resinous plant extract and water. Short Stop, a syrup containing licorice and wild cherry extract, ammonium carbonate, small amounts of an antimony salt, benzoic acid, camphor, oil of anise and traces of an alkaloid. Antiseptine, a powder composed essentially of anhydrous zinc sulphate and lead acetate together with a small amount of copper acetate. Cassidy's 4X, consisting essentially of aloes, colocynth, resins, and a small amount of a mercury salt, alcohol and water. "P. G. S." (Schuh Drug Co.), consisting of plant extract, including extract from a laxative drug, resin, and not more than a trace, if any, of mercury, alcohol and water. Red Cross Pile Cure, suppositories consisting essentially of cocoa butter, tannin, menthol, a lead compound, iodid, sulphate and possibly acetate (*Jour. A. M. A.*, May 22, 1920, p. 1473).

PROPRIETARY VS. NONPROPRIETARY.—The exhibit of the A. M. A. Chemical Laboratory at the recent New Orleans Session of the A. M. A. contained a card comparing the cost of drugs sold under proprietary and nonproprietary names. The following list compared

(Continued on Adv. p. xviii)



IMPORTANT SQUIBB BIOLOGICALS

AT THIS TIME OF THE YEAR

For the Treatment of Pneumonia

especially of Type I, (Lobar Pneumonia)

Anti-Pneumococcic Serum is of great value. It should be used early in large quantities and full doses repeated every six hours until the crisis is passed; also **Anti-Streptococcic Serum** is important for pneumonia in addition to anti-pneumococcic serum. It is best not to use the two mixed, but to administer each separately as the symptoms and bacteriological findings demand.

Anti-Streptococcic Serum Squibb is useful also in post-partum or puerperal sepsis, in erysipelas, and for septic conditions due to wounds infected with streptococci.

For Increasing Phagocytosis in Sepsis

Leucocyte Extract is of paramount importance, either in conjunction with vaccine and serum, or alone if the exact pathogenic microorganism can not be determined.

For the Prevention and Cure of Diphtheria

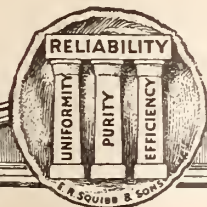
Diphtheria Antitoxin (Globulin) yields desired results. It is small in bulk for the number of units contained.

For the Prevention of Small-Pox

Small-Pox Vaccine is the trustworthy prophylactic.

Reprints giving detailed information will be furnished on request

E. R. SQUIBB & SONS, NEW YORK
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.
80 BEEKMAN STREET



A House of Service

5—Distribution of Therapeutic Agents

A PHYSICIAN can go into a drug store in New York, Chicago or San Francisco and get Parke, Davis & Co.'s standardized pharmaceutical, glandular and biological products. Likewise a physician can go into a drug store in Sydney, Tokio, Petrograd, Bombay, Paris, London, Havana or Buenos Aires and get these products.

Such a world-wide service to physicians is made possible because of our four manufacturing plants—one in Detroit; one in Walkerville, Canada; one in Sydney, Australia; and another in Hounslow, England.

From the several laboratories the products are sent to thirteen branch houses and depots in the United States and to nine branch houses and depots in foreign countries. The branch houses and depots in turn distribute the products among drug stores

all over the world and thus place them at the ready disposal of physicians.

This house could not serve the physician and his patients quickly without the assistance and co-operation of the druggist. The druggist, in other words, is the medium through whom it is possible to place a representative stock of our products in nearly every community, where they are immediately available in any emergency.

We maintain a staff of 434 salesmen and detailists. These men reach every habitable portion of the globe. Their function is not altogether that of selling, but of service to the physician as well. Trained in pharmacy, they render a useful service to physicians by showing how our products meet their needs and how physicians benefit through the use of standardized therapeutic agents.

PARKE, DAVIS & COMPANY

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 7

FORT WAYNE, IND., JULY 15, 1920

PER YEAR, \$2.00
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES		PAGE	EDITORIALS		PAGE
An Unusual Case of Temporary Incarceration of Transverse Colon within Bilateral Hernial Sacs. Don J. Royer, M.D., Fort Wayne, Ind.....		227	Variations in Wassermann Reactions.....		241
Epidemic Encephalitis in Northern Indiana. A Suggestion for a Rational Plan of Treatment. R. V. Hoffman M.D. South Bend, Ind.....		228	Medical Law Enforcement		241
The Physician. The Training of an Intern. Frank B. Wynn, M.D., Indianapolis		232	The Better Hospital Movement.....		242
Acute Appendicitis. R. C. Ottinger, M.D., Indianapolis. 235			Christian Scientists' Attitude on Medical and Public Health Legislation		242
The Autogenous Bone Graft. Lyman T. Rawles, M.D., Fort Wayne		238	Editorial Notes		244
			MISCELLANEOUS		
			Deaths		246
			News Notes and Personals		246
			Book Reviews		256
			The Truth About Medicines		257
			SOCIETY PROCEEDINGS		
			Indiana State Medical Association		253
			Tippecanoe County		254

NEXT ANNUAL SESSION, SOUTH BEND, SEPT. 22, 23, 24, 1920.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103, ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

Volume I Now Ready

Surgical Diagnosis and Treatment

BY EMINENT SURGICAL AUTHORITIES

EDITED BY

ALBERT J. OCHSNER M.D., F.A.C.S.

Professor of Surgery in the University of Illinois; Surgeon-in-Chief to the Augustana and St. Mary's Hospitals, Chicago, Ill.

*Four octavo volumes of about 850 pages each, with over 2,000 illustrations, many in colors.
Cloth, per set, \$40.00, net*

"THE GREATEST SURGERY OF ALL TIME" is what we believe you will call this work, for seventy-six of America's greatest surgeons have written it.

It in every sense reflects the current practice and thought of the most intensely active surgeons of this continent. Its chapters tell the why and how in the solution of each surgical problem, what to do and what to avoid. It brings you in touch with the actual experience, reasoning and practical methods of men eminent in all parts of the country. Each one describes intimately his methods of diagnosis, his plans for treatment before and after operation and gives his judgment regarding them. This monumental work gives you the opinions not of one man, but the combined experience, skill and advice of seventy-six of our foremost surgeons.

Each man writes on the field in which he has achieved greatest success and fame

Send for literature descriptive of this work

PHILADELPHIA

LEA & FEBIGER

NEW YORK

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, South Bend, September 22, 23 and 24, 1920

OFFICERS AND COMMITTEES FOR 1920

President CHARLES H. McCULLY, Logansport
 1st Vice President BUDD VAN SWERINGEN, Fort Wayne
 2d Vice President SAMUEL HOLLIS, Hartford City, Ind. | 3d Vice President CHARLES STOLTZ, South Bend
 Secretary-Treasurer CHAS. N. COMBS, Terre Haute

SECTION OFFICERS

Surgical Section—Chairman, James Y. Welborn, Evansville; Vice Chairman, M. R. Combs, Terre Haute; Secretary, H. O. Shafer, Rochester.

Medical Section—Chairman, Charles P. Emerson, Indianapolis; Vice Chairman, B. S. Hunt, Winchester; Secretary, Jane Ketcham, Indianapolis.

Eye, Ear, Nose and Throat Section—Chairman, John R. Newcomb, Indianapolis; Secretary, E. M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1920), Joseph Rilus Eastman, Indianapolis. Alternate, Miles F. Porter, Fort Wayne.
 For two years (term expires December 31, 1921), Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington.

COUNCILORS

Chairman, G. W. H. Kemper, Muncie.

DISTRICT	TERM EXPIRES	DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920	7th—T. B. Eastman, Indianapolis.....	December 31, 1920
2d—J. B. Maple, Sullivan	December 31, 1921	8th—G. W. H. Kemper, Muncie.....	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922	9th—William R. Moffitt, Lafayette.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920	10th—E. M. Shanklin, Hammond.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921	11th—G. G. Eckhart, Marion.....	December 31, 1921
6th—T. S. Spilman, Connersville.....	December 31, 1922	12th—E. E. Morgan, Fort Wayne.....	December 31, 1922
		13th—H. M. Miller, South Bend.....	December 31, 1920

(See list of committees on page iv)

To the Medical Profession

Dear Doctor:

What do you do with your alcoholics and drug users?

The Hygeia Hospital service is maintained to take care of the habit cases that come to you for advice. Our method of treatment destroys the craving.

We deliver a fixed result—practically 100 per cent. There is but slight discomfort during the treatment. The toxemias resulting from the habit we correct.

If interested write for reprints.

WM. K. McLAUGHLIN, M. D., Supt.

Office State-Lake Bldg., Suite 702-4 - - - Chicago, Ill.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., JULY 15, 1920

NUMBER 7

ORIGINAL ARTICLES

AN UNUSUAL CASE OF TEMPORARY INCARCERATION OF TRANSVERSE COLON WITHIN BILATERAL HERNIAL SACS

DON J. ROYER, M.D.
FORT WAYNE, IND.

The following case, occurring in the practice of Dr. G. W. McCaskey, has been very interesting from several standpoints, and has demonstrated to us the advisability of a second examination in cases presenting an uncommon condition at the first examination.

It generally has been accepted that what is seen on roentgen examination is constant, aside from the many differences of opinion regarding the interpretation of the findings in the individual case. This case evidently contradicts this accepted view.

The history in this particular instance was rather indefinite from start to finish, and the gastro-intestinal examination with the roentgen ray was decided on after everything else had been done. It was really more a matter of routine to obtain all available data. An abstract of the case history and clinical findings follows:

Mr. B., white, married, aged 35, a butcher; came in complaining of "stomach and bowel trouble" dating back twelve or fifteen years. He had no gastric or intestinal symptoms, but complained of a feeling of distress in the left side of his abdomen in the left lumbar region. He said there was something in there that would not let the food pass out of his stomach. He had no constipation, yet he said the stool was very small. At a variable time after eating this distress would come on and he would have to use an enema to obtain relief. For some time past he had been using rectal dilators nearly every morning, and thought they were a great help. His trouble was attributed

to his work, i.e., lifting and carrying heavy articles. He also mentioned that he had a small lump in each groin, one of which he had had for several years, while the other had appeared within the past year.

On physical examination nothing of note was discovered aside from the fact that he had a temperature of slightly over 100 F. during the first few days of the examination.

The blood showed a slight secondary anemia and a normal white cell count with 77 per cent. polymorphonuclear leukocytes. The Wassermann was 1+. Analysis of the gastric con-



Fig. 1

tents revealed a moderate degree of hyperacidity. The stool was negative.

In view of the fever the sputum was examined, but yielded no information of value. Stereoscopic roentgenograms of the chest were made but added nothing to the findings.

Roentgen examination of the gastro-intestinal tract revealed a large stomach, centrally located, with the greater curvature two fingers breadth

below the level of the iliac crests. There was hypoactivity. No filling defect noted. The stomach was freely movable and not tender to pressure. The cap was noted four fingers' breadth above the level of the iliac crest, and one finger's breadth to the right of the median line. It was regular in outline, freely displaced in all directions, not tender to pressure, filled and emptied regularly, although not quite so swiftly as generally observed in the normal. The succeeding portion of the duodenum was firmly fixed under the hepatic margin, which was rather low down. No tenderness on pressure was elicited in this region. At the end of six hours the stomach was empty, and the head of the barium meal was just entering the cecum. There was a scattered residue in the small bowel and quite a mass in the terminal ileum. At the twenty-four hour



Fig. 2

period the large bowel was filled from the cecum to the left extremity of the transverse colon. There was a rather small amount of barium in the descending colon and sigmoid, but the splenic flexure was not filled. On first sight, with the patient behind the vertical fluoroscope, the transverse colon appeared markedly dropped and manipulation was attempted to ascertain the degree of mobility. Instead of displacing the intestine upward as anticipated, it was found to be firmly bound down behind the pubes (Fig. 1). The two small "buds" at the lower level were really a part of the transverse colon, and not the rectal pouch, as the illustration suggests. On digital examination bilateral herniae were found. At the forty-eight hour period there was a considerable residue in the transverse colon, which remained in the same position noted above, and the remainder of the tract was empty.

As was mentioned above, the patient was having a temperature of 100 F. every day and feeling rather badly, so for this reason the examination was discontinued at this time and the patient sent home to recuperate from an acute respiratory infection.

At the end of a week, the greater part of the time having been spent in bed, he again presented himself for examination, and was given another barium meal to study further the incarcerated colon, and to determine accurately the degree of stasis present. The upper alimentary tract showed practically the same condition as noted on the first examination. At the twenty-four hour period, instead of finding the expected condition, we found the transverse colon in a practically normal position (Fig. 2) with no evidence of the herniae. At the end of forty-eight hours the entire tract was empty.

Following the second examination a surgeon was called in consultation. He corroborated our findings as to the presence of herniae and advised an operation. Several days later the case was operated and small bilateral hernial sacs repaired. No further roentgen study has been made since.

COMMENT

This case has been of great value to us, again demonstrating the questionable value of a clinical history alone, and also putting us on our guard against laying too much stress on a single examination. Here was a man, apparently psychopathic, showing a marked ptosis of the transverse colon with incarceration of a portion of it within bilateral herniae. On account of a transient ailment the first examination was discontinued making a second necessary, which showed a practically normal colon. The case emphasizes the advisability of a second examination for verification where uncommon conditions are found.

My grateful thanks are due Dr. G. W. McCaskey whose kind permission rendered the use of the above material possible.

EPIDEMIC ENCEPHALITIS IN NORTHERN INDIANA

(A SUGGESTION FOR A RATIONAL PLAN OF
TREATMENT)

R. V. HOFFMAN, M.D.
SOUTH BEND, IND.

Reaching our Atlantic seaboard in the autumn of 1918, the epidemic of encephalitis swept steadily north and westward arriving on the Pacific slope during the winter of 1919-1920. Following its implantation in a community,

sporadic cases sprang up in unexpected places, there being little or no evidence of contagion to those persons who had been in close contact with the patient during the incubative or active stages. It is very probable that isolated cases will spring up in our community during the present spring and the following winter.

While the majority of cases are reported to have had a "cold" or "influenza" preceding the attack of encephalitis, a smaller number have been noted that were entirely well before the onset. "Influenza" has preceded or accompanied practically every epidemic of encephalitis, as was noted at Tübingen in 1718; Germany in 1745; Lyons in 1800; Milan in 1802, and Vienna in 1917. Our national epidemic of influenza in 1890 was the only exception. It is strongly suggestive that epidemic encephalitis is caused by either the germ and virus responsible for influenza, or by another micro-organism whose symbiotic existence is dependent on the prevalence of influenza in the community.

Despite the great amount of research by competent investigators, the agents responsible for the two diseases remain unknown. The careful studies of Wegeforth and Ayer¹ denoted that the most common lesions found postmortem are "perivascular exudation and diffuse infiltration into the brain tissues." Flexner² adds "an outpouring of plasma or lymph into the tissue interstices (edema)." Perhaps the most commonly observed clinical phenomena are ptosis, diplopia, other involvements of the third, and to a lesser degree of the other cranial nerves. As histologic studies show no destruction of or about these nerve centers, it would appear that the outpouring edema affects these centers either by mechanical pressure (analogous to the early stage of acute anterior poliomyelitis), or by the depressive effects of the circulating toxin. The majority of case reports mention that the cerebrospinal fluid emerges from the puncture needle under increased pressure.

Reasoning from the above premises it seems logical to conclude that beneficial results will be produced, if the increased intracranial pressure be reduced, or if the toxin of the cerebrospinal fluid be diluted. One obvious solution to both problems is the frequent withdrawal of portions of the circulating cerebrospinal fluid. The idea is not a new one. It is becoming more and more evident that the benefits derived from intraspinal therapy in meningococcus meningitis, are in a large part due to lowering of the

subarachnoid tension, and to dilution of the cerebrospinal fluid. The work of Olitsky³ in China, where he saved three times the number of patients from meningitic fatalities by the simple withdrawal of cerebrospinal fluid, that were saved when the measure was not employed, strikingly confirms that fact. Sachs,⁴ of Mount Sinai Hospital of New York, states that in all cases that had come under his observation death was due not to general toxicity, but rather to involvement of cardiac and respiratory centers. Frazier's⁵ studies have shown that depleted cerebrospinal fluid is restored to normal volume in a comparatively short time after withdrawal of an average portion. That would suggest that dilution of the toxin plays a part, as well as does the lowering of the intracranial pressure. Ely⁶ reports remarkable improvement in one of his two cases of epidemic encephalitis, immediately following the withdrawal of 20 c.c. of fluid that was ostensibly drawn for diagnostic purposes.

There are two practical methods by which tension in the subarachnoid space may be lowered. The principal and simpler method is by lumbar puncture. Inasmuch as there is no cause for adhesions or other obstructions to form and prevent free circulation of the cerebrospinal fluid, there is no apparent reason for choosing the intraventricular or cisterna magna routes. The more complicated and less frequently indicated method is the intravenous injection of hypertonic solutions of electrolytes. Salt solution and glucose solution are the electrolytes commonly employed. Glucose is usually preferable as it provides a source of nourishment, which is frequently much needed in these cases, as difficulty in swallowing food is a condition often present. Acidosis from starvation must be guarded against. The work of Weed and McKibben⁷ has shown that the intravenous injection of such hypertonic solutions causes a short temporary rise in the spinal fluid pressure, followed by a marked lowering of the tension which remains low for a comparatively long period of time.

My experience with intravenous injections of glucose in other infectious diseases, presenting meningismus symptoms, has been decidedly favorable. To date I have not had the oppor-

3. Olitsky, P. K.: Experiences with a Recent Epidemic of Meningococcic Meningitis Among a Chinese Civil Population, *Arch. Int. Med.* 23:380 (March) 1919.

4. Sachs, B. L.: Epidemic Central or Basilar Meningitis, *New York M. J.*, 109:894, 1919.

5. Frazier, C. H.: The Cerebrospinal Fluid in Health and Disease, *J. A. M. A.*, 64:1119 (April 3) 1915.

6. Ely, F. A.: Lethargic Encephalitis, Preliminary Report, *J. A. M. A.*, 72:985, 1919.

7. Weed, L. H., and McKibben, P. S.: *Am. J. Physiol.*, 48:512 (May) 1919.

1. Wegeforth, P., and Ayer, J. B.: Encephalitis Lethargica, *J. A. M. A.*, 73:5 (July 5) 1919.

2. Flexner, Simon: Encephalitis Lethargica, *J. A. M. A.*, 74:13, 805 (March 27) 1920.

tunity to utilize the procedure in epidemic encephalitis. The optimum time for its employment would be at the height of the disease. An average dose would be about 350 c.c. of 25 per cent. glucose, every twenty-four hours. Haden,⁸ who reports striking success in the resuscitation of moribund cases of increased intracranial pressure complicating other infections, recommends the use of as much as 250 c.c. of 40 per cent. glucose every twelve hours.

Repeated lumbar puncture has been of appreciable value in the few cases I have treated. The following is a report of those cases:

CASE 1.—Mrs. C. Z., aged 29, white, a robust Jewess, whose former health was always good. She had a "cold" late in November. December 7, she complained of pain in back of neck. Next day two decayed molars were extracted, which were regarded as infected foci. On third day she half closed her eyes, and was oblivious of her surroundings. Was admitted to hospital December 11, when I first saw her. Her features assumed a mask-like appearance. She opened her lids only when responding to forcefully put questions. Pupils were in chronic "pin point contraction," with very faint reaction to light. Her cranial nerves otherwise functioned normally. There was a slight tendency to assume cataleptic positions, after having been posed. Throat, heart, lungs, abdomen and vagina were normal. Ear drums were clear, and ocular fundi showed some edema of the nerve heads, but no actual choked disc. Knee jerks were moderately exaggerated, but there was no clonus anywhere, and the Kernig and Babinski signs were negative. Vital functions were involuntary. Fever varied from 100 to 102 during her stay in the hospital. Pulse ranged from 108 to 140, and respirations were 18-22.

Her urine was normal, white blood cells 8,360 to 13,200, the polymorphnuclears reaching a maximum of 86 per cent. Blood cultures and Widal remained negative throughout. On the second day lumbar puncture was performed and the fluid spurted out under considerably increased pressure—140 mm. of water (patient recumbent). Thirty c.c. were removed. The patient was decidedly clearer mentally during the ensuing twenty-four hours. The fluid was clear, and no web formed on standing. Culture and Wassermann were negative. One cell was counted and no globulin could be detected. Two days later a second puncture was made, the patient again becoming noticeably clearer. As the patient's husband was not satisfied that palliative treatment was sufficient, he consulted another physician who advised an immediate exploratory operation on the brain, presumably for brain abscess. No abscess or other pathology

was found at operation, the patient dying shortly afterward. There was no necropsy.

CASE 2.—Mr. P., white, aged 20. Formerly healthy and of strong physique. Became dizzy February 15. Three days later fronto-occipital headache developed, which has persisted most of the time. Two days later noticed double vision, with strabismus occurring simultaneously. One day later bilateral ptoses appeared. By this time the face had become listless. He never smiled, nor did his facial expression ever change, despite the fact that he would carry on an intelligent conversation. Answers to direct questions were delayed an average of 6 seconds, as were also his intentional actions. Said he "felt fine." He was physically normal from head to feet, excepting mesial deviation of left eye. The left superior oblique muscle was weak. The right disc was edematous, the left normal. Deep and superficial reflexes were normal, and there were no ataxiae. The corneal reflex was present, and both Babinski and Kernig were negative. Temperature, 99 to 100.5; pulse, 88 to 102. White blood cells ranged from 11,500 to 15,000.

He was admitted to hospital on tenth day. Spinal fluid was under a pressure of 145 mm. water. Thirty-five c.c. were removed, and twelve hours later his responses to questions were reduced to a delay of three seconds. Puncture was performed daily for six days. On account of normal temperature, reduction of ptoses and apparent well being the patient was discharged to his home in the country. Five days later he returned to the office complaining that he was "always falling asleep." The ptosis was a little more marked. When punctured the spinal fluid was under a pressure of 160 mm. of water (recumbent). Forty-five c.c. were removed as a therapeutic measure. Felt "much better" the next thirty-six hours. Tapped after an interval of three more days, and 30 c.c. withdrawn. By that time the ptosis had practically cleared, as had the edema of the right disc. He had an uneventful convalescence, his facial expression becoming again active twenty-eight days after onset of the disease.

MR. P. CEREBROSPINAL FLUID

	Pressure (mm. water)	Cells	Glob.	Wass.	Cult.	Sugar	Colloidal Gold
1..	145 mm.	71	0	Neg.	Neg.	..	23443100
2..	110 mm.	85	0	Neg.	Neg.	0	.....
3..	.....	91	0	.....	.....	0	.....
4..	.....	128	0	.....	.....	..	234432100
5..	.....	..	..	Neg.	.....	..	.....
6..	Normal	52	..	.....	.....	0	.....
7..	160 mm.	7	0	.....	.....	..	434554100
8..	.....	..	..	.....	.....	..	.....

Note.—No. 7 was performed six days after preceding puncture.

CASE 3.—Mrs. R. O., aged 32, white. Previously healthy and robust. Had two previous normal pregnancies. About one week before her present delivery she had a "cold." She was delivered of a normal, healthy baby. During

8. Haden, R. L.: Therapeutic Application of the Alteration of Brain Volume, J. A. M. A., 73: 983 (Sept. 27) 1919.

her early puerperium, she was troubled for one week by inability to sleep during any part of the time. The usual hypnotics and narcotics were employed unsuccessfully, until sleep was produced by the use of "chlorotone." During this time the patient "did not seem herself" and showed no instincts to nurse and fondle her child that she had displayed for her former babies. Frequent twitching of her voluntary muscles was observed. There was no fever of more than one degree during that time. As her condition gradually improved she was taken to her home. On March 23, her husband noticed that she paid but little attention to her surroundings, answering only when directly addressed. Her temperature was then 99-100. The next day her axillary temperature rose to 102.5, and pulse 120. I first saw the patient on the third day. Temperature remained about 102.5 and pulse 128. She was unable to swallow, but her cranial nerves were otherwise intact. She paid no attention to the examination, but would answer fairly clearly when directly questioned. The upper lids drooped but there was no permanent ptosis. The pupils reacted to light, and the fundi showed moderate edema of both discs. Deep and superficial reflexes were normal, except that the knee jerks could not be elicited. The neck was limber, and the Kernig and Babinski phenomena were negative. There was a diffuse red blush over the abdomen suggestive of scarlet fever. The throat was not red. White blood cells were 9,680, of which 79 per cent. were polymorphnuclears and 17 per cent. were lymphocytes. Blood cultures produced no growth. A culture from the cervix showed only the flora found commonly in the lochia. There was no odor to the discharge and no abdominal signs of pelvic organ infection.

Lumbar puncture gave forth a clear fluid that was under markedly increased tension. Thirty-five c.c. were drawn. It showed no globulin and 150 cells. The culture remained sterile. The gold sol read 3455544110. The urine was normal throughout. Patient was noticeably clearer that night—eight hours after puncture. I did not see the patient after that time. Her attending physician stated that she was considerably better the following day and her temperature dropped to about 100, the tachycardia, however, persisting. She was being fed carbohydrates, and alkalis were administered to prevent acidosis. The day after that she was again improved and mentally somewhat clearer. That night at 11 o'clock she had talked to her husband and seemed to be getting along satisfactorily. Half an hour later he heard suddenly gurgling in her throat, and when he reached her side she was dead, presumably from pulmonary embolism.

The following case is typical of the milder group of cases, that recover without specific treatment. The diagnosis of these cases is sel-

dom clean cut, and depend mainly on diagnosis by exclusion—during the presence of an epidemic of encephalitis:

CASE 4.—Mrs. G., white, aged 30, formerly very healthy, had had a "cold" during early February. About February 10 she became very drowsy and went to bed. Her lids drooped, but never permanent ptosis. Paid no attention to questions unless forcefully put. Remained in bed two weeks, during which time her "eyes did not look straight." Took food, but had difficulty in swallowing. Developed weakness in right hand and foot, but not in upper arm or leg. Never actual paralysis. Temperature seldom above 99, pulse 88, respiration 20. Urine was normal and normal blood count. No diagnosis was made.

Comatose condition disappeared two weeks later. Patient did not remember anything that happened during the two weeks.

The case was referred to me on April 15, two months after the initial onset. She was now entirely well except for brief periods of amnesia. She arranged to meet her mother the morning of her office visit, and one hour later had no recollection of the appointment. She was physically normal from head to feet, excepting moderate weakness of the flexors of the right forearm. The knee jerk was hyperactive on the right. The Achilles, biceps, triceps, peroneal radials and abdominal reflexes were normal. Babinski and Kernig were negative and there was no Romberg sign. Both pupils reacted normally to light and accommodation. All cranial nerves functioned normally except for a divergent strabismus of the left eye. The lateral rectus of that eye was weak, but not paralyzed.

The blood pressure was normal and the arteries soft. The heart was normal in size, rhythm and sounds. Both ocular fundi were clear and there was no reason to suspect sclerosis of the cerebral vessels. The urine was normal, and a catheterized specimen remained sterile on culture media.

Her memory for remote events was accurate. For recent events it was somewhat hazy. The power to subtract figures was fatigued after four or five mental subtractions. She could repeat narratives or sentences accurately.

Her periods of amnesia have not occurred for several weeks, and the strength of her hand is gradually approaching normal.

SUMMARY

1. The etiology of epidemic encephalitis is unknown. Its chronology strongly suggests that it is identical with influenza, or symbiotically coexistent with it.

2. Its pathology is essentially exudation, infiltration and edema into the brain tissues. One of its important physiologic changes is increased intracranial pressure.

3. In the absence of destructive lesions of brain tissue, it seems reasonable to assume that the dysfunctionation of some of the nerve centers is partly due to abnormal pressure, and partly to depression caused by circulating toxins.

4. Clinical improvement has been noted when the increased intracranial tension has been reduced, or perhaps when the toxin in the cerebrospinal fluid has been diluted.

5. The use of frequent spinal drainage, and the employment of hypertonic solutions intravenously in selected instances are advocated as an addition to our therapeutic armamentarium.

THE CLINIC.

THE PHYSICIAN

THE TRAINING OF AN INTERN *

FRANK B. WYNN, M.D.

INDIANAPOLIS

The intern is a product of modern medical development. For his youth and inexperience he has been ridiculed and mistrusted by the public. By his superior staff officers he has often been condemned for inefficiency or goaded to open rebellion by the restrictions and requirements placed on him. Yet through it all he has been buoyed up by his youthful enthusiasms, and hopeful aspirations of medical idealism. In the crucible of criticism, he has become more refined—scientifically, morally and spiritually. From a position of mere toleration by the public, as one gaining knowledge and experience at the expense of the sick and afflicted, he has now been granted the rank of respectability as a public servant ministering to the needs of the unfortunate. To his seniors in the profession he has become a necessity, being to them eyes, ears, and hands in the performance of multitudinous medical duties in the great charitable institutions. The intern, therefore, is entitled to a respectful hearing.

Hospital growth in the past fifty years constitutes one of the most noteworthy features of medical progress. It has arisen out of advancement in the realm of pathology and bacteriology, and the practical application of this knowledge to surgery and medicine. It was soon demonstrated that the great truths of pathology could best be applied in diagnosis and therapy, under hospital supervision. The advocacy of the hospital, therefore, for the treatment of certain maladies, was urgently advised by the medical

profession. Laymen were slow to accept this advice but gradually prejudice has been overcome. At the present time the difficulty is for institutions to keep pace with the public demand for hospital care.

Hospitals always have and always will constitute an important adjunct to medical teaching—a clinical training laboratory, where the undergraduate and recent graduate come into close contact with cases and their management. With hospital multiplication and development, has multiplied also the number of interns and resident physicians. Many recall the day when not one in a hundred of those graduating ever took an internship. At the present time it is the exception for a young man graduating in medicine not to seek such training. Some of the university medical schools are now requiring a fifth, or hospital year; and the trend of medical opinion is toward the universal application of this principle. Granting, then, that the recent graduate should take a year's training as an intern, may it not be well to discuss some of the advantages, perhaps even stressing the errors into which interns are likely to fall.

The writer is frank to confess that his memory harks back to medical student days in the general clinic, when he looked almost with awe at the interns who were privileged to read histories, assist at operations and stand close to the august-clinician. I scarcely dared the audacious thought then, that I might some day become a medical teacher, but there was nursed the fond hope that some day I might be honored by a hospital internship. And when the day came, through stressful competitive examinations which then prevailed, that I was privileged to stand in the amphitheater as an assistant, an honest confession compels me to admit, that I felt the importance of my position more than any other honor which has since fallen to my lot. With a great deal of inward amusement I watch the new intern, assuming his responsibility, recalling my own feelings and therefore excusing him for his evident sense of importance. Perhaps no place in his spectacular and dramatic career does his pardonable egotism and self-importance stand out more, than when he is on the ambulance service. Behold him, the commander of dramatic or even tragic situations, ordering the crowd to stand back, administering emergency measures, the cynosure of a gapping throng, a hero in a little tragedy. He is thrilled by it, and why begrudge him the passing delight.

And what melody rings in his ears when he is addressed as "doctor." Gliding from pa-

* Third of a series of articles by Dr. Wynn which will appear regularly in THE JOURNAL.

tient to patient in the ward, he experiences a sort of massed effect when patients greet him by the well earned title. His dignity and self-respect ascend still higher when he is asked the diagnosis of the disease and when cure may be expected. The nurse, too, augments his self-importance by heeding with rapt attention his orders. Thus, he is master of the field until his staff chief appears; then his attitude changes from omniscience to respectful obedience.

He becomes responsible for the history taking, and clinical notes. He makes laboratory tests, physical examinations and special investigations all of his own initiative. Perhaps, however, his greatest thrill comes when he is entrusted with assisting at a major operation. At last he is right in the midst of things, not merely seeing but actually participating in the technic. He holds instruments, clamps vessels, and may even be honored by an invitation to close the cutaneous incision. Thus, from one to another the round of new experiences passes. How different it all is from the theoretic and didactic, which had grown rather stale with him. He feels that now he is equipping himself to cope with every emergency and every task of practice. To him it all seems very fine; indeed it is a most valuable practical schooling for his life work.

But the very fullness and brilliancy of these experiences, may blind him to very important facts. One mote very apt to get into his eye, will be a growing disposition not to read up on his cases. He excuses himself in part on the ground of multiplicity of duties. Everything is in a whirl and rush. The high spots in diagnosis only are touched; peculiar signs and symptoms he may not take the time to unravel. Short cuts in diagnosis are apt to become a besetting sin with him. If a patient gives a history of chronic cough, he relies on sputum examination to determine whether or not it is tuberculosis. He stops without carefully working out the location and extent of the lesion. Older foci of disease may be overlooked; intercurrent maladies and complications are not discovered. Or he puts the burden of diagnosis on the roentgen-ray laboratory without first exhausting thoroughgoing means of physical exploration, which would take time, but reveal facts of great interest and practical value. Sad to relate it is notoriously true that the intern is prone to lapse in the matter of medical reading and study, after taking up hospital work. This, of course, is in part due to his multifarious duties and re-

sponsibilities; it is just as often the result of an indolent habit. Now, of all times, he should have close at hand the proper texts; and in unusual cases should go farther, and seek the periodical literature bearing on the case. Some institutions (especially those under university control) foster this spirit; in others clinical conferences and critical scientific discussions are carried on by the interns under a senior house officer, or a member of the staff—a most excellent plan. More frequently nothing is done, and the men drift into lax habits in studying cases. Intoxicated by the thrill of experiences and responsibilities placed on him, the intern is loath to retire to the meditation of his room and the quiet counsel of textbooks. He has had a taste of action, and reflective study seems stale and unproductive. He fails, in the glare of things, to distinguish between skimming and getting to the bottom of knowledge.

A prevalent thought in the mind of the recent graduate is that he should see a great many cases. He becomes gorged by the quantity of clinical material. Mental indigestion results and of course lack of assimilation. It is true that in many of the public institutions, the bulk of routine work which must be performed, under the direction of superiors, does offer excuse oftentimes for cutting both reading and study. The intern owes it to himself, however, at least to give critical study to selected cases. Infinitely better, a few cases well studied, and completely charted than many patients superficially studied.

Still more precarious is the work of an extern doing visiting or ambulatory dispensary service. The very necessity of the work, seeing many patients and getting through with he grilling routine by scheduled hours begets superficiality and carelessness, both in diagnosis and treatment. Viewed from the sociologic and humanitarian standpoint, this is extremely important work which must be done and done right. To the extern it entails great sacrifice, giving a training which is quite apt to be superficial, and perhaps spoils a young man who has in him the making of a good doctor.

A very positive risk faces every intern in a public hospital because of the character of the clientele. The majority of those treated are from the uneducated and lower social strata. This should never excuse the intern from being at all times a gentleman. Courteous dignity and the niceties of good manners are prone to degenerate into harshness if not coarseness. Gentle and sympathetic consideration for the

feelings and foibles of these unfortunate people is not merely their due from the physician; it is a rare privilege for him to bring courage and sunshine to their often times desponding souls. Even with social outcasts there is opportunity not merely to serve, but to cultivate urbanity and the art of approach to confidential and professional relationship. Not to cultivate these is not to prepare oneself for generalship, to command in the trying battles which must be waged over and over again in professional life.

The popularization and growth of hospitals has made a correspondingly large demand for interns. The institutions multiplying are chiefly of the semi-public or proprietary type, more particularly for the treatment of surgical cases. Most of them are under religious direction, or the control of self-perpetuating boards. Viewed from the standpoint of the intern's interest a brief and frank discussion of these institutions is offered.

The first objection to them is that the patients in the main are private, and therefore not open to free and unhampered study by the intern. Unlike the ward rounds in the public hospital, the medical or surgical attendant seldom calls for the intern in making a visit to the patient. Besides assisting in the operating room, the resident medical man finds his routine to consist largely of answering night emergency calls and making conventional dressings. Second, there is the equally valid objection to these institutions, that the cases are almost entirely surgical. He is given an over-weening impression as to the relative importance of surgery and internal medicine. It is a lopsided training. He is apt to forget that nine out of ten, perhaps double that number of physicians, are general practitioners, and, therefore, this is the phase of hospital training which should be given first place. And even if one should be contemplating work in some special field of medicine, by all means he should have a thorough general training first, afterwards perhaps seeking an internship in an institution devoted exclusively to the particular speciality. Taking the proprietary hospital at its best, it is granted that the intern does receive, on the average, good surgical training. He is permitted to assist at many operations; but even here he may be denied the privilege, for the surgeons of greater prominence prefer to have their own specially trained assistants. The so-called staff of such institutions is generally made up of a large number of medical men, permitted to participate in the work of the institution chiefly because they bring business

there and not because they are distinguished in a professional sense. Average decency is the only standard set up, and even this may be violated at times. The intern suffers in consequence. He is very apt to become the assistant of those below standard, surgically speaking. It is not rare for the intern to be more competent than the operator himself. True, such an intern is gaining hospital experience, but is it of the sort that will prepare him for first class work—medical or surgical? He sees the clamping and tying of many blood vessels; learns to make a pursestring suture and other surgical "kinks," and is occasionally granted the honor of making cutaneous sutures and final dressings. He is amazed at the bungling of some so-called operators. Finally, he reaches the unfortunate attitude of mind, that there is not much in surgery, except asepsis and technic. Instead of a mountain-top view of the surgical realm, he falls into the canyon of technic. He fails to get the breadth of view which shows him that the approach to the summit of achievement is by the foothills of anatomy, physiology and pathology; that he must first traverse the fertile valleys of internal medicine; likewise of general and special diagnosis. By these routes only will he attain the mountain peak of surgical success, rich in a wide experience, and gifted with that fine attainment called surgical judgment—competent to grapple with the startling emergencies and difficult situations. That is to say, he becomes a true surgeon rather than a mere mechanic.

SUMMARY

1. The public hospital (state, municipal or endowed institution) properly manned and endowed, offers the largest advantages for the training of an intern.

2. Proprietary hospitals, with but few exceptions, restrict the intern's freedom and opportunity for the clinical study of cases, and overemphasize to him the importance of surgery. The training is good as far as it goes but is lop-sided, not preparing a man for general work; nor laying the best foundation for a speciality.

3. The intern's hospital days constitute a joyous period of his life—rich in benefits to himself, but fraught with dangers which he should seek to control. Let him not be blinded by the glare of thrilling experiences, so that he fails to consult textbooks or current medical literature.

4. No matter how ignorant or low in the social strata his hospital clientele may be, the intern can never afford to be anything but a

gentleman—alert of course to scientific truth, but always sympathetic with the foibles and feelings of the unfortunate.

5. Hospital multiplication now taking place by leaps and bounds, must take larger account of laboratory facilities for diagnosis and instructional purposes. Not merely should there be the granting of larger participation in the clinical work of the institution by the house staff; it should be required. All this to the end that a higher standard of scientific and clinical work be developed in hospitals; and for the equally important reason that interns be broadly and thoroughly trained to bear the medical and surgical burdens of the future.

(To be continued)

ACUTE APPENDICITIS

R. C. OTTINGER, M.D.
INDIANAPOLIS

In presenting this paper, it is not so much the purpose of conveying new ideas as it is to emphasize the importance of early diagnosis and surgical intervention and the care and after-treatment of cases of acute appendicitis.

The appendix is a functionless tube emptying into the cecum on its posterior and inferior surface. In size about 3 or 4 inches long and from one fourth to one third of an inch in diameter, generally pointing downward and inward. In but very few cases do we not find a meso-appendix triangular in shape, containing its blood vessels. The appendiceal artery is more frequently found coursing along free edge of mesentery and sending up its branches to appendix.

Appendicitis in infancy is infrequent; in young adults frequent; in middle life fairly common; in old age unusual. Some families seem to be more prone to appendicular trouble than others, as high as three or four cases being reported in the same family by some authorities.

The etiologic factor of first importance, as all authorities and operators of experience agree, is partial or complete obliteration of the appendiceal lumen at some point.

Micro-organisms, especially colon bacillus, are found normally at all times in gastro-intestinal tract in a semi-saprophytic state. This situation obtains in the appendix as a part of the gastro-intestinal tract, and so long as the drainage of the lumen is not interfered with, cause no trouble, but just as soon as they are retained under pressure, at once become virulent.

The retention may be due to inflammatory swelling, concretions, kinks or strangulation. Some authorities contend that trauma is an etiologic factor in appendicitis, but the consensus of opinion is that external trauma rarely enters into causation of appendicitis, but trauma due to concretion is a very frequent cause of inflammatory condition, gangrene, perforation or pus in the appendix.

The pathologic anatomy in acute appendicitis gives us many and varied pictures. We find changes in size, length, contour, direction, location, thickness and contents. Any one or more of these is frequently found in the individual case.

The pathologic process may involve one or all the coats of the appendix. In the catarrhal form or beginning appendicitis, the mucous membrane alone is involved, and in many cases seen and operated in a few hours after acute attack, we find that the mucosa has lost its velvety appearance and has become swollen and edematous, with here and there small petechial hemorrhages or find the lumen filled with a bloody exudate. Where the infection is of a more virulent nature and the swelling and edema more intense, we find gangrene of the mucosa. This is followed by deeper invasion or the continuation of the process through the walls of the appendix to rupture at this point with the escape of the products of infection into the pericecal region; where Nature at once throws up a protecting wall, causing a localized abscess, or the infection is scattered throughout the abdomen with a general peritonitis resulting.

Foreign bodies, most always a fecal concretion, are found in a large percentage of gangrenous appendicitis. The concretion causes an irritation or erosion of the mucosa with inflammatory swelling, resulting in the closing of the lumen of the tube and ischemia at the point of pressure. Below the obliteration of the lumen the imprisoned micro-organism becomes more virulent, and we find many times a swollen appendix full of pus in these cases; in others, which have gone on to perforation at point of concretion with abscess formation or general peritonitis, and still in others, gangrene of the entire appendix, with a seropurulent fluid, bathing the abdominal contents, with a general peritonitis resulting.

In localized abscess the position of the abscess is not necessarily in the right iliac region. They are found up under the liver and right kidney, in the left iliac fossa, in the pelvis, or just under abdominal wall in median line. We find an acutely inflamed and perforated appen-

dix sometimes adherent to the right fallopian tube or ovary or to the bladder. It has been found high up under the liver adherent to gallbladder. Postcecal abscesses are quite frequent, the diseased appendix being found extending upward and along the posterior wall of ascending colon.

The first symptom of acute appendicitis is pain, an acute colicky pain over entire abdomen or in epigastrium, which usually localizes in right iliac region, but which sometimes localizes in left iliac region or around umbilicus. This colic is invariably followed by nausea and vomiting. Nausea and vomiting come on in a few minutes to a few hours following the colic. It never precedes the pain (Murphy). Tenderness around McBurney's point comes on with rigidity of right rectus muscle. The abdominal tenderness is at first diffuse, but becomes localized in right iliac fossa as appendix becomes distended and more inflamed. This tenderness continues localized in those cases which Nature walls off, but becomes diffuse again in case of rupture, either of appendix or appendiceal abscess, with resulting general peritoneal infection.

Temperature comes on in from three to twenty hours.

Leukocytosis is present in most cases (97 per cent., according to Murphy).

The pain usually reaches its greatest intensity in the first twelve hours, at which time it gradually decreases or stops suddenly, which means one of three things: first, the emptying of secretions into cecum, improbable; second, rupture of or complete gangrene of the organ.

The cessation of pain is often misinterpreted by the attending physician and patient, and is considered a good sign by both, when in reality it is only the "lull before the storm." Everything seems to be going along nicely for the first few hours, after which the patient's condition takes a decided change for the worse. The respiration and pulse increase, pain becomes severe, abdomen become tympanitic and the picture of a general peritonitis is seen. The face becomes drawn and pinched, and the patient looks seriously sick and is seriously sick. The temperature has very little to do with the seriousness of the condition as a rule, but the pulse is a good guide usually to the severity of the peritoneal insult.

In other cases cessation of pain is followed by Nature's effort at localization of infection. This condition will be discovered by the palpation of a boggy mass in region of appendix, which continues to enlarge, frequently causing a bulging of right side and containing great quantities of pus.

In these cases we frequently find no evidence of appendix, it having sloughed off; or it may be found in abscess cavity. There is the danger of the rupture of the abscess wall in this class of cases with general peritonitis following. The primary nausea and vomiting is due to overdistention of the appendix with product of infection, and lasts only a short time. The persistent nausea is due to a peri-appendical inflammation or peritoneal insult. In cases where Nature walls off this infection, the nausea abates. In cases where there is no attempt at localization, the nausea persists until operation or death of patient.

The diagnosis of acute appendicitis is not always easy, and in fact the differentiation between acute appendicitis and other acute abdominal conditions will at times tax the most skilled diagnostician. The differential diagnosis between cholelithiasis, cholecystitis and appendicitis is sometimes difficult, especially when the appendix lays high up under the liver adherent to it or the gallbladder. We usually have the history of gallbladder attacks to help us out. In most cases of gallbladder disease, there is pain under right shoulder blade; jaundice in cases of impacted stone in the common duct is positive evidence of obstruction to gallbladder and liver drainage. In some cases it is impossible to differentiate until abdomen is open.

Perforation of gastric or duodenal ulcer may be diagnosed as appendicitis, or vice versa, but in these conditions the persistence of vomiting is not so marked, especially in the gastric perforation. In appendicitis, nausea and vomiting with period of rest followed by persistent vomiting.

The pain in perforation of stomach or duodenum is if anything much more severe than in appendicitis. The abdomen is not only rigid on right side, but there is a board-like hardness over entire abdomen with retraction that cannot be mistaken for the right-sided rigidity of appendiceal disease. The history of epigastric pain related to food; nausea and vomiting; continued localized tenderness in epigastrium combined with history of hematemesis or tarry stool are significant of gastric or duodenal disease. Frequently following perforation of stomach or duodenum, there is an immediate disappearance of hepatic dulness.

Acute pancreatitis may simulate acute appendicitis. Here the patient, who has been in the best of health and robust, is suddenly seized with an acute agonizing pain in upper abdomen, frequently followed by collapse, and vomiting sometimes persistent and uncontrollable. Pulse

rapid and weak, respiration fast and shallow. The abdomen is here, as a rule, not rigid or tender except on deep pressure. The rapid increase in severity of symptoms is a significant diagnostic sign.

Torsion of the omentum may be diagnosed as acute appendicitis, or vice versa, but here we rarely have history of previous attack. Omental torsion, as found most frequently in people with hernia, and the sudden appearance in abdomen of tumor mass is usually sufficient to make a diagnosis.

Typhoidal perforation may be confused with appendicitis, but the symptoms and course of the attack gives us our diagnosis.

The passage of a calculus through a ureter and appendicitis may confuse us, but close attention to symptoms will usually clear up a doubtful situation. Appendicular pain does not often radiate down through genitals and thigh, as is always the case in passage of kidney stone. There is the history of urinary disturbances ordinarily in kidney stone not in appendicitis.

Adnexa disease in women may simulate appendicitis, but vaginal examination with history of the case is usually sufficient to clear up the diagnosis. Pneumonia in children and young adults has been diagnosed as appendicitis, but we have here no rigidity, no local tenderness, and if the patient is carefully examined no such mistake will happen.

There are many conditions arising in the abdomen which are confusing, but if symptoms are properly interpreted the right diagnosis can be made in a majority of cases.

TREATMENT

Appendicitis is a surgical disease and is cured only by surgery.

Most authorities and surgeons of experience say every case of acute appendicitis should be operated at once, and they make these statements because experience has taught them the treacherous nature of the disease.

Of course, there are cases of such virulence that even operation in the first twenty-four hours fails to cure. In these cases there is diffuse widespread general peritonitis of the most virulent character. The whole abdominal content is bathed in a seropurulent fluid of terrible toxicity, which kills in a very short time. Operation in this class of cases is absolutely the last chance.

The salvation of these cases is the removal of the offending organ with plenty of drainage, rubber tubing being the best drain. The Fowler position is an important factor, as it causes

gravitation of fluid to the lower abdomen, protecting the upper zone. The Murphy method, proctoclysis, is another very important part of the after-treatment. Salt, soda and glucose solution by hypodermoclysis or intravenous may also be necessary. I have seen some of these terrible cases survive. There are a few cases in such bad shape due to waiting too long that operation would be of no avail. These patients if placed in extreme Fowler's position, abdomen packed in ice, Murphy drip started or perhaps intravenous or hypodermoclysis of salt, soda and glucose solution given, nothing by mouth and morphin if necessary for pain, improve and localize their infection, converting a hopeless case into one with fairly good prognosis following operation.

There is also a class of cases in which we have an enormously distended abdomen with obstruction due to the peritonitis. I question whether merely the removal of the appendix and drainage will cure these patients. During my association with Dr. Noble, we had several such cases, and I believe their lives were saved by puncturing the distended bowel and expressing their contents. It most certainly does relieve diaphragmatic pressure and helps eliminate the absorption from the intestines.

The cases in which the appendix has not ruptured and the abdomen contains no seropurulent fluid, wound is closed without drainage.

The type of incision preferable is the McBurney incision, with the possible exception of the type of case referred to above of obstruction with greatly distended intestines or cases suspected of having other coexisting pathology.

The packing off of the intestines after the muscle splitting operation over an appendiceal abscess lessens the possibility of contaminating the free abdominal cavity. The diseased appendix should always be removed if it can be done without breaking down Nature's barrier which has localized the infection. Postoperative complications are comparatively frequent in suppurative appendicitis. Intestinal obstruction due to adhesions, pelvic abscesses, which may be so large as to cause obstruction, and abscess pockets in other locations; subphrenic abscess I have seen twice; hepatic abscess is found at times. Fecal fistula frequently follows those cases in which the appendix and cecum are thickened and friable, the suture cutting through. I have yet to see a fistula of this sort not heal.

In considering the mortality rate, we find that the earlier an acute appendix is removed the lower the rate.

Schnitzler reports 444 acute cases: 152 operated on first day, with seven deaths, or 4.6 per cent.; 292 on second day, with twenty-two deaths, 7.46 per cent.

McWilliams reports 687 acute cases, with 6 per cent. second day; 7 per cent., third day; fourth day, 18 per cent.; fifth and sixth days, 14 per cent.

The statistics collected at Camp Custer, comprising 330 cases, with eight deaths, or 2.4 per cent., is, I think, very good indeed. This was due to the fact that the majority of cases were operated early within first twenty-four hours.

To sum up treatment of appendicitis, I will say every case of acute appendicitis should be operated, and at once. In the severe cases, plenty of drainage, Fowler's position and salt, soda or glucose solution, either Murphy method or other methods, are the *all* important factors in the postoperative treatment.

The prognosis of the disease is in most cases good, except in those terrible cases of perforation with widespread general peritonitis. In these cases prognosis is not good, as the patient is usually overwhelmed with the toxic products of the disease before operation.

In conclusion, let me reiterate the importance of the essentials in the care of this disease: first, early diagnosis; second, early operation; lastly, proper after-treatment.

THE AUTOGENOUS BONE GRAFT

LYMAN T. RAWLES, M.D.
FORT WAYNE, IND.

Until of comparative recent years the treatment of fractures was by the so-called closed methods. Many attempts had been made at the open method, but until Lane of England perfected his technic most operations of this nature were not satisfactory, although all were not complete failures. After Lane perfected his technic and gave it to the medical profession, the percentage of failures has gradually decreased until now the open method of the treatment of fractures is no longer looked on with the same amount of fear as of previous years, although the surgeon regards all operative procedures where the bone is involved with the greatest respect.

The surgeon who has the regard for his patient's welfare in mind, as well as his own reputation, will not attempt extensive operative work on the osseous tissue unless he has certain

fundamental conditions existing prior to the date of his operative procedure. In the first place, no operative procedures of this nature should be undertaken outside of a hospital where all precautions against infection cannot be carried out. Trained assistants are invaluable and save time, for time is a valuable thing to be considered in bone work, as all operations of this nature are necessarily time consuming; also trained assistants will not add trauma to the already extensively traumatized parts, thus inviting infections. The mechanical equipment of the modern operator should be as near complete as possible — it saves time and lessens trauma. A thorough anatomic knowledge of the parts to be operated also saves time and extra trauma. The equipment for after-treatment is also an important factor for success, as it saves time on the part of the surgeon, and makes the nursing easier and decreases the chances for bad results. The modern hospital should have the fracture beds, the Bradford frames and the Balkan suspension apparatus, as these are apparatus that add to the comfort of the patient and are time-saving devices for the surgeon and nurse.

Much has been said in regard to the time to operate fresh fractures when the open method is chosen. Some choose to operate as soon as possible up to three days; others choose to wait ten or fourteen days. Personally, I believe the best surgical judgment is to wait until the hemorrhage is nearly absorbed, the swelling has disappeared and the traumatized tissue has partially restored itself, as all are predisposing factors to infection. The external wound in soft tissues in compound fractures should be healed. Fractures with delayed union should be operated as soon as possible unless there is an infection. If there be an infection, it should be treated surgically and the fracture treated afterward, although bone repair will take place in the presence of infection.

Do all fractures require the open method? No; simple fractures do not, and I believe Geiger's idea and classification is a very sensible one to follow:

1. Fractures that can be reduced by manipulation and held in perfect position by external fixation; in such cases the open method is contraindicated. In this very large group of fractures good functional and anatomic results may be, and are, obtained by the external method.

2. Fractures where the fragments cannot be reduced by external manipulation to perfect anatomic relations. The fractured ends should be exposed by an incision, and the broken ends of

of the bone placed in proper position. After reduction has been perfected, if the fractured ends can safely and securely be immobilized by external fixation, internal fixation is not required.

3. Fractures where it is necessary to expose the fractured ends by an incision to bring about a proper reduction, and where it requires internal alignment and both internal and external fixation or immobilization to secure the desired results.

The dictum of Jones is worthy of repetition. He says: "Where a surgeon is doubtful of his ability to treat a fracture by nonoperative procedure, he should consider if he could do better by the open method." Geiger says: "Practically every type of fracture needs operative interference if complete reduction is otherwise impossible." No case of fracture should be operated or treated unless a thorough roentgen-ray study has been made, for how well we know of cases in which we were certain of good reduction and afterward the roentgen-ray showed a very, very faulty apposition.

THE ELEMENTS ENTERING INTO BONE REPAIR

The Periosteum: So much has been written about this membrane that it seems almost preposterous to say very much about it in a paper of this character. From an historical standpoint, its study was begun by Havers in 1692. Many another writer has given his views, but Olliers' work, which was begun in 1858, has stood the test of time. In the preparation of the autogenous graft the retaining of the periosteum has always been a question in my mind. I have retained it in some cases and some cases I have not. As a rule, I do retain it, although I cannot say that I can see any difference in the end results of where it has been retained and where it has not. I will give Geiger's ideas:

1. That the periosteum in itself has no osteogenetic power, outside of the adhering osteoblasts.

2. By the removal of the periosteum from a bone-graft, a great number of osteoblasts on the surface of the bone are removed and destroyed, thereby reducing the osteogenetic function of the graft very greatly.

3. That if the periosteum is left intact on the transplant, it supplies nourishment by the blood supply to the osteoblasts that come in contact with, and just beneath, the periosteum, and cause them to live, thereby stimulating osteogenesis.

4. That the endosteum supplies nutrition to the osteoblasts on the inner surface of the bone, or that are nearby, or that come in contact with

the endosteum, because of the thorough blood supply of the endosteum.

5. That if the endosteum is removed from the transplant, a number of osteoblasts on the inner surface of the bone are destroyed, with the blood supply, thereby reducing the osteogenetic function of the graft.

6. That by leaving intact both periosteum and endosteum we preserve the blood supply, thereby giving nutrition to the cells that are responsible for the regeneration of bone and nutrition of bone and nutrition which is responsible for the apparent life of the graft or transplant.

7. Bony protuberances, condyles, etc., detached from all tissue save the periosteum, unite like free autogenous grafts covered with periosteum.

8. Detached bone, protuberances or condyles, with healthy periosteal covering, and attached more or less to other tissues, continue to live.

9. By using autogenous bone grafts, if good apposition is obtained, we have a very small callus, as small as in simple fractures, with good apposition.

10. The autogenous graft seems to live, but in reality it does not; the trabeculae are gradually replaced by bone growing inward from the vascular spaces between them, while the cartilage continues to live, and to a limited extent aids in the formation of the new bone adjacent to it.

11. The principal replacement of bone in the trabeculae takes place directly from the bone cells, without the preliminary formation of cartilage; and the dead portion of the trabeculae are absorbed in a line immediately adjacent to the new growing bone, without the addition of special cells.

A great deal has been said pro and con about the introduction of foreign material in the repair of fractures. Lane invented his technic, also his plate, and Lane reports successful work with it, but if his statistical reports are true, Lane is about the only surgeon that gets the high percentage of excellent results. Lane's plates are excellent pieces of mechanism in some places where properly used, but like all other work judgment must be used as to where and when to introduce a foreign material that is to be left, as it invites infection. Generally speaking, whenever nails, screws, wire, etc., are placed in bone, sooner or later there is a rarefaction and absorption about them with a mild infection following. Until recent years the Lane plate was considered par excellence.

Albee gives the following reasons for the plate producing nonunion:

1. They prevent end-to-end stress of the fragments, not allowing motion which is essential to the stimulation of bone growth.

2. They not only inhibit bone growth, but cause actual destruction of bone. They traumatize the soft parts, interfere with the blood supply and produce cicatricial formation.

The features above enumerated are always present when the plate is used. The following are present in a considerable number of cases and are due either to faulty technic, some surgical accident or to the false conception of its usage.

3. Infection is invited by the use of any metallic substance, and where infection occurs at one end of the plate, it travels the entire length of the plate, following the screws into the medullary substance of the bone. In the use of the bone graft, the infection is usually localized and does not involve the whole graft.

4. Faulty technic: When the plate is applied with a resulting hiatus between the ends of the fragments, and when the plate is fastened with this intervening space, there is no chance for Wolff's law of adaptability or Roux' law of fractional irritation to work; consequently, nonunion or malunion. Wolff's laws is as follows:

"Every change in the form and position of the bones or of their function is followed by certain definite changes in their internal architecture and by equally definite secondary alterations of their external conformation, in accordance with mechanical laws."

In every case of nonunion, which has existed for any length of time from any cause whatsoever, there is always a distinct pathologic change in the fragments, consisting of elimination and degeneration of bone cells, an increase in calcium salts, or in other words, a sclerosis. The use of the metal band has the same action, only it is more marked than the Lane plate.

THE INLAY GRAFT—AUTOGENOUS

In view of the fact that plating, nailing, banding, wiring, etc., by the introduction of metallic substances into bony tissue are not as satisfactory as the autogenous graft, so we naturally turn to that method for repair of fractures that cannot be treated by the closed method.

In discussing the Albee method of treatment, it is necessary to turn to the author for his technic, which has been adopted by practically every surgeon doing bone work; the Albee technic differs in but few ways from the Lane technic, which was given to the profession a few years ago, and is the same that was adopted by the Surgeon-General's Office during the recent war.

The preparation of the patient is of the greatest importance. It is as much so as in an abdominal operation, and the following precautions are taken:

1. Guard against infections.

2. Rapid operative treatment.

3. Fixation of the parts after operation.

1. Guarding against infection by the proper sterilizing of the skin and following the technic of Lane by never placing the hand into the wound and never an instrument the second time without resterilizing.

2. Rapid operative work will save the patient from a prolonged anesthetic, and by the modern electrically driven instruments save them from certain amount of shock.

3. The fixation of the parts should always be done at once, and never should a patient leave the table unless thoroughly splinted or in a cast; if forced extension is used, then the cast should be applied before the extension power is released, and fixation should be thorough and absolute, so there will be no change of traction on the sutures, etc., afterward, for many a perfect piece of work has been spoiled by this oversight, especially where the tendons are sutured, also where the dowel and pegs have been used, a cross pull may break them, leaving the successful operation a total failure.

Not all fractures are to be treated with inlay or sliding graft, but dowering used instead; the same methods hold good as in inlay work. Aside from fractures, one of the most notable features of the inlay work, I think is the treatment of tuberculosis of the spine by the Albee method or by the Hibbs method. Both are intended to bring about the same results, the Albee inlay in the split processes of the vertebrae going well above and well below the point of infection. The Hibbs method is the breaking forward of the vertebral process and placing the tip of the lower into the fractured portion of the upper, then keeping the patient in bed for eight or ten weeks with a spinal brace, and allowed to be out of bed walking at the end of twelve weeks. Albee used the Bradford frame while patients are in the recumbent position. This is an easy way to care for adult patients, as their stay is from six to ten weeks after operation. As a matter of choice in the two operations for Pott's disease in children under 4, I believe the Hibbs operation possibly is the best. It does not shock the patient as much as the Albee, where the tibia is cut into for the inlay, and you virtually do two operations.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

JULY 15, 1920

EDITORIALS

VARIATIONS IN WASSERMANN REACTIONS

From the *Journal of Laboratory and Clinical Medicine* we reproduce an editorial on "Variations in Wassermann Reactions" which we think will be of interest to our readers, and which is as follows:

It has been the custom at the Psychopathic Department of the Boston State Hospital to have Wassermann reactions done at two different laboratories. This has been done to safeguard the patients against erroneous conclusions based on one test, and to obtain information which would be valuable in estimating the laboratory results, i. e., to make interpretations more exact. The results of this comparative work in 3,000 cases is given in a recent article by Solomon.

First as to methods: One laboratory uses three cholesterinized antigens of different sensitiveness to check each positive reaction. The other uses, in addition to cholesterinized antigen, an acetone-insoluble antigen. Whenever possible, those cases in which the reports from the two laboratories did not agree were retested, on the assumption that possibly a technical error was the cause of the variation. Usually in such cases the reports agreed after the first test. In some cases in which one laboratory made the test many times with consistently positive results for ten, fifteen, or more times, a negative reaction would suddenly crop out and be followed in subsequent tests by a series of positives. Solomon seems to believe that this may have been due to error in technic, though he ventures the possibility of a change in the patient's serum, "a condition which is not so very likely, and which at any rate is not explicable." (One wonders whether Solomon can explain the Wassermann reaction itself.) However that may be, the total number of variations between the reports for the two laboratories was 6.56 per cent., but this includes those cases reported positive, moderately positive, or doubtful by one laboratory, and negative by the other. In cases reported positive by one laboratory and negative by the other the variation was 4.0 per cent., which represents a figure of 1.4 per cent. positive in one laboratory

and 2.6 per cent. in the other. In the cases known to be syphilitic there were thirty-five reports that did not agree. Of these twenty were reported positive by laboratory "A" and negative by laboratory "B." Fifteen were reported negative by laboratory "A" and positive by "B."

Some of the cases, says Solomon, reported positive by one laboratory and negative by the other were known to be syphilitic so that the negative reaction was the incorrect one. In other words, in some cases the Wassermann reaction furnishes a result that is of no immediate value in a case. It is a symptom which may be laid aside if it be negative, which means that the Wassermann reaction is a symptom which, when definitely present, is of value. A strongly positive reaction is a symptom (sometimes designated as 100 per cent. inhibition of hemolysis, or 4+), probably means syphilis, but a negative reaction does not exclude it. The varying reactions between a strongly positive and a negative one may or may not mean syphilitic infection and a true interpretation in each case must be left to the clinician who has all the data on which to base a diagnosis. The serum of certain individuals, perhaps of all, may contain at times substances which produce false positive reactions. Serum which has stood at a high temperature, especially when it is not sterile, may give false positives. In the case of one of the laboratories mentioned by Solomon, often the blood did not reach the laboratory for three or four days. The records of this laboratory were not as good as those of the other. Then, also, mercury and arsphenamin lead to false negative reactions and it is believed that a negative reaction on cases which have been under treatment is of value only when it was obtained six weeks or more after the termination of the medication.

It seems to be the consensus of opinion that the original Wassermann technic using the anti-sheep system gives, taking it by and large, the most reliable and constant results. There are many modifications, some of which give remarkable sensitivity. According to Kolmer, these give from 2 to 8 per cent. negatives; from 3 to 10 per cent. false positives and that with them at least 2 to 10 per cent. of human sera can not be used to make the test without further modification in technic.

BIBLIOGRAPHY

Solomon: J. A. M. A. 74:788, 1920.
Kolmer: Am. J. Syph. 3:541, 1919.

—————P. G. W.

MEDICAL LAW ENFORCEMENT

The chiropractors are arranging for a convention to be held in Fort Wayne, and according to newspaper reports several thousand chiropractors are expected to attend. What a

joke our educational standards are when persons with limited general education and no medical training worthy of the name are permitted to practice medicine in any of the states of the Union. In Indiana a person with less than a high school training and having had but a few weeks of so-called chiropractic schooling is unmolested in attempts to treat the sick and suffering, and are permitted to do everything that a reputable medical man does. The only difference between the two is that the chiropractor seems immune from either prosecution or persecution whereas the medical man, even if he is a graduate from a university and has received his medical degree at the expense of an additional four or five years of training, is brought up with a sharp jerk if he varies a hair's breadth from compliance with our medical laws. Certainly there is a screw loose in the machinery that controls the consistency and justness with which laws and regulations for the practice of medicine are enforced. If a chiropractor can practice medicine without going through the formality of being educated or complying with any local requirements, why should it be necessary for anyone else to comply with requirements? Why make members of the regular medical profession the goats for prosecution and persecution when quacks and pretenders are unmolested? Certainly the time is ripe for a show-down in this matter of enforcement of the laws regulating the practice of medicine. If our present medical practice act is worth nothing, then let us wipe it off the statute books, for if it means anything at all it means that every person who wishes to practice the healing art in the state of Indiana must comply with the same requirements concerning preliminary education and training in the cardinal branches of medicine and surgery. If this be true then the law should be enforced without fear or favor, and if it cannot be enforced then it should be wiped off the statute books.

THE BETTER HOSPITAL MOVEMENT

The movement for better hospitals, inaugurated by the American College of Surgeons, has resulted in considerable constructive work that is being shown in increased facilities, standardization, and improvement in the morale of a large number of hospitals in this country. Much more will and should be accomplished in the future through the efforts of those physicians who are vitally interested in improved hospital organization and administration. What is most needed is the elimination of the careless and

slipshod manner in which hospital cases are examined and treated by attending physicians and cared for by the hospital organization. In too many hospitals either no records are kept or the records are so imperfect and meager in information as to be worthless. The carelessness in getting complete histories, recording the complete physical and laboratory findings, and later, a detailed record of treatment and results secured, not only furnishes the basis for carelessness and inefficiency on the part of superintendents and nurses but leads to very unsatisfactory and inexcusably inefficient results for the patient. Many hospital organizations have attempted reforms but have gone at the matter rather faint-heartedly, and without that enthusiasm which should mark the progressive institution. Such hospitals need the stimulating influence of criticism, attended with the necessity of complying with certain definite requirements in order to be rated among the better class of hospitals, wherein lies a great work for the committee on hospital standardization of the American Medical Association. Let us hope that the committee will have sufficient funds to carry on a thorough investigation of the qualifications of all of the leading hospitals in the country, with the intent and purpose of not only acting in an advisory capacity and offering suggestions for improvement, but in actually rating hospitals according to their qualifications and in a manner which will permit of the record being made public.

CHRISTIAN SCIENTISTS' ATTITUDE ON MEDICAL AND PUBLIC HEALTH LEGISLATION

The chairman of the Christian Science Publication Committee for Indiana recently visited the editor of *THE JOURNAL* for the purpose of "clearing the atmosphere" a little as to the attitude of the Christian Scientists concerning medical and public health legislation, and, as stated by the aforementioned gentleman, to prove that "some Christian Scientists are without horns." Incidentally, the representative who paid the visit referred to seems to be a very likeable chap, gentlemanly in manner and sensible in most things, though, like all Christian Scientists, misguided concerning demonstrable facts relating to the cause and cure of disease. However, the interview brought out the statement that the Christian Scientists are not opposed to and will not oppose medical or public health legislation of any sort providing no legislation is proposed which will limit the sphere of

usefulness (?) of the Christian Science teaching and practice. This all sounds very fine but there is a "stinger" to it which bids fair to create trouble, for there are some of us who contend that Christian Science teaching and practice is inimical to the best interests of the public when it prevents or limits the practice of well-recognized treatment or interferes in any way with established rules covering the control of communicable diseases. For instance, it is nothing short of criminal to permit Christian Science families to treat their diphtheritic children by Christian Science ministrations, or by any other fanatical tommyrot in the face of established facts concerning the almost specific action of antitoxin.

Admitting that the Christian Scientists obey quarantine and all of the rules of the boards of health, as claimed by them, we believe that it is criminal to permit Christian Scientists to be the judges as to the kind and character of disease that is present in a given individual, and whether or not any treatment other than Christian Science ministrations shall be employed. In reality we have no objections if any adult person in his right mind, perverted though it may be by Christian Science theories, elects to accept Christian Science ministrations as the only treatment for his syphilis, scarlet fever, diphtheria, malaria, appendicitis, malignancy, or broken bones, but that sort of tomfoolery should end when it means a menace to others. The man who tries to commit suicide is prevented from doing so if possible and legal restrictions are brought into play if necessary in order to accomplish the purpose; but we always have contended that limitation of human rights, even to committing suicide, is a question of propriety as long as the community is not seriously injured thereby, and yet the biblical injunction of "being thy brother's keeper" perhaps justifies us in offering some protection to the mentally unbalanced when they attempt to do those things that are not only damaging to themselves but, in a sense, damaging to the community as well.

We confess that there are many persons with imaginary ills who are benefited by some psychologic effect such as that produced by Christian Science reasoning, as we also know that some of the loudest clackers for Christian Science are those who think they have been cured of various kinds of serious diseases but who in reality had little the matter with them when they took up the Christian Science faith. No definite pathologic lesion ever was or ever will be cured by Christian Science, and the best

proof of this assertion is that Christian Scientists, like all other human beings, are suffering from and dying with diseases which no Christian Scientist should have, and if existing ought to be cured by Christian Science practice if that sort of ministration is worth anything. Even the so-called Christian Science cures, when subjected to analysis, generally turn out to be no cures at all, either because the patient did not have the disease he was supposed to have at the time Christian Science faith was adopted, or because the disease was in that stage of retrogression where neither Christian Science nor any other form of treatment would have been necessary in order to bring about a cure. In short, Christian Science never has been put to a satisfactory test that would be accepted by any rational and unbiased judge and the Christian Scientists themselves have been studiously careful to avoid such a test.

If Christian Science, unaided by other means, will cure even 5 per cent. of 100 well marked cases of syphilis, malaria, diphtheria, purulent appendicitis, gallstones, glaucoma, optic nerve atrophy, strychnin or arsenic poisoning, or a dozen other morbid conditions that we definitely diagnose and for which we have a rational therapy, then the editor of *THE JOURNAL* is willing to praise Christian Science from the house tops, and donate all of his worldly possessions to the nearest Christian Science Church. He also will be willing to endorse a lot more of the tommyrot of the Christian Scientists who believe that there is no such thing as disease, pain or physical suffering; and as further evidence of his adherence to the belief of the Christian Scientists of the unreality of physical discomfort he will proceed to go without an umbrella or rain coat when it rains, and look with scorn on the coal man who tries to furnish warmth for the coming winter by filling the coal bin with soft coal at the unheard of price of \$12 to \$14 a ton. If there was the slightest consistency in Christian Science teaching there would be no occasion for physical suffering or discomfort for any of the Christian Science disciples, and there would be no occasion for sickness and untimely death among them, nor need for the ministrations of a regular physician who almost invariably is called at some period of a devoted Christian Scientist's career. As we once remarked, when a Christian Science reader called for material help when suffering excruciating pain, a sharp attack of gallstone colic is no respecter of persons, even a Christian Scientist, and a good dose of morphin fol-

lowed up by a skilful surgical operation will give relief when the practice of Mrs. Eddy's doctrine has failed ignominiously to convince the patient sufferer that there is nothing the matter with him.

But, as we started out to say, the Christian Science representative who recently called on the editor of *THE JOURNAL* has proved his point, which in effect is that all Christian Scientists do not have horns. They may not have an over abundance of gray matter in their craniums, or use what little they have with any consistency, but they do not have horns. In fact, the representative in question seemingly is a very agreeable fellow, and we believe that we might enjoy a game of golf with him or even companionship on a few days' fishing trip, but we never could agree with him that Christian Science has the place in the world of usefulness that is ascribed to it by its adherents, and for the very reason that the faith as well as its works are intangible and cannot be subjected to analytical reasoning. If, as has been stated, the Christian Scientists are upholding the state board of health and all the laws and rules governing public health, and if, as has been stated, the Christian Scientists are not opposed to the raising of standards for the practice of medicine and for the betterment of public health conditions through quarantine, sanitation, and similar measures, then we give them credit for having a little common sense which is being exercised for their own good as well as for the good of others. We are, however, opposed to any provision which will permit Christian Scientists to make their own diagnoses of disease, to ignore the recognized rules of procedure in the treatment and control of communicable diseases, or to practice their peculiar illogical and inconsistent beliefs on the innocent and defenseless. If Christian Science was confined to imaginary ills we would offer no objection to its practice, for we believe that the spirit of optimism which is characterized and emphasized in the Christian Science faith is valuable in the treatment of psychic disturbances, and while such treatment under the name of psychotherapy is practiced by many regular physicians it is not practiced enough. But when it comes to applying Christian Science to the graver disorders that are demonstrable by clinical and laboratory findings, and amenable to successful treatment in a large proportion of cases by rational scientific treatment, then we say the time is ripe for calling a halt on Christian Science activities.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in *THE JOURNAL*, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask *THE JOURNAL* about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want *THE JOURNAL* to serve YOU.

AN interesting program has been arranged for the South Bend meeting of the Indiana State Medical Association. Remembering our former sessions at South Bend we are led to believe that the coming session will be a most interesting one from a social standpoint, and, with a good scientific program promised, there is every reason to anticipate a large attendance.

THROUGH an unfortunate misunderstanding in printing the June issue of *THE JOURNAL* (this year) an insufficient number of copies was run off and accordingly this office lacks the required number for our files. Members who do not keep a file or bind their *JOURNALS* will confer a great favor by sending their June copy to us after they have finished reading it.

APROPOS of our editorial in the June number concerning lay anesthetists we are advised that the Union Hospital of Terre Haute has adopted the following rule: "No anesthetics shall be administered at the Union Hospital by any person other than a licensed physician or dentist except in cases of emergency." We think that is quite the proper attitude to assume, and we commend the Union Hospital for the stand that has been taken.

THE gasoline shortage is a severe blow to physicians in some localities in Indiana, and those doctors who for days have been obliged to go on foot or by street car to visit their patients have had a taste of what it would be to do away with some of our modern conveniences. The doctor who thinks he is busy when he finds most of his day taken up in visiting his patients, but does so through the convenience of his automobile, will certainly think he is overworked if he has to go back to the now almost

obsolete horse and buggy. Let us hope that gasolineless periods will be few and far between, but in the meantime the wise doctor will, when he can, put in a reserve supply of gasoline for emergencies.

OWING to the crowded condition of hotels it is highly advisable for all those who are planning to attend the South Bend session of the Indiana State Medical Association, September 22, 23 and 24, to make reservations at once. The Oliver Hotel has been secured for headquarters, and the Jefferson Hotel one block from the Oliver can furnish first class accommodations. Also, the Mishawaka Hotel, Mishawaka, Ind., a fifteen minute car ride, offers very desirable accommodations. Address either of the above hotels, or write to Dr. S. A. Clark, South Bend, Chairman of the Committee on Arrangements.

THE National Committee for the Prevention of Blindness, in cooperation with the Illinois Society for the Prevention of Blindness, has issued a pamphlet on "Trachoma," which is short, graphic and to the point. Trachoma is gaining a foothold in many sections of the United States, Indiana not excepted, and this pamphlet, which is known as Publication No. 20, "Trachoma—How to Recognize and How to Control It," has been issued to meet the demand for an educational campaign. Indiana doctors and health officers in communities where trachoma has been found, should avail themselves of some of these leaflets which may be obtained in quantity lots at the cost of printing, \$25 per thousand, F. O. B. New York.

AT the recent convention of the osteopaths held in Chicago arrangements were completed for putting on a strong campaign to obtain admission of osteopaths to hospitals and other public institutions. We presume the chiropractors will soon follow suit, and if the medical profession continues in its present lethargic condition no doubt such admission will be gained, and operating rooms will be turned into "rubbing parlors" and "adjustment sanctorums." It is time for the medical profession as a whole to come to its senses and realize the responsibility resting on it in educating the public concerning the fallacies of these pseudomedical cults who so brazenly put forth their claims of healing and so slyly attempt to gain footholds in every conceivable place and put across favorable legislation for their cults.

VOLUME I, No. 1, of *Annals of Medicine*, with abstract of the world's literature, has just come from press. This publication is to be issued quarterly in the interest of American medicine under the direction of the councilors of the American Congress of Internal Medicine and the American College of Physicians. Dr. Frank Smithies of Chicago is the supervising editor, with an editorial council consisting of Drs. Glentworth R. Butler, Joseph H. Byrne, Elias H. Bartley, Augustus Caille, John A. Lichty, Frank M. Pottenger, Frederick Tice, Reynold Webb Wilcox and Clement R. Jones. W. F. Prior Company, Inc., Hagerstown, Md., are the publishers, and this initial volume is a credit not only to the editors but the publishers as well. The subscription price in the United States and Canada is \$10 per year, \$3 for single copy; all other countries, \$12 per year.

SINCE the publication of our editorial on "Lay Anesthetists" in the June number of THE JOURNAL, we have been informed that any number of surgeons or would be surgeons have been having their anesthetics given by nurses or even office girls who have had no particular training for the work. While we may be treading on dangerous ground in one sense, yet we desire to emphatically condemn the practice to which our attention has been directed. There certainly will be a day of reckoning for some of the operators who employ lay anesthetists, and we believe that if the matter gets into a court of law, all reputable physicians should place their seal of disapproval on a practice of that kind. There is no excuse for not having a reasonably well trained anesthetist in every community, and there probably is not a city in Indiana that has not one or more really skilled anesthetists among members of the regular medical profession. In the first place it is not justice to the operator nor to the patient to employ lay anesthetists, and in the second place it is a rank injustice to those medical men who are making more or less of a specialty of anesthesia to ignore them in this highly specialized work.

UNDER the auspices of the federal government thirty-five scientific researches in the leading laboratories of the United States are being conducted simultaneously today for the discovery of more effective medical measures in the treatment and prevention of venereal diseases. The problems, the personnel and the laboratories concerned have been carefully considered by the Interdepartmental Social Hygiene Board before approval. Among the laboratories which

have been granted appropriations for this research work since January, 1920, are the following: University of Iowa College of Medicine, under the direction of Dr. Henry Albert, professor of pathology and bacteriology. Research proposed: A selective medium for the isolation and cultivation of the gonococcus. Northwestern University, Department of Chemistry, under the direction of Frank C. Whitmore, Ph.D., of the department of chemistry. Research proposed: Synthesis of new organic mercury compounds for use in treatment of syphilis of the central nervous system. Washington University School of Medicine, St. Louis, under the direction of Dr. Borden S. Veeder, professor of clinical pediatrics. Research proposed: A study of hereditary and congenital syphilis with particular reference to the progress of the disease in the individual and the effect of treatment. Harvard University Medical School, under the direction of Dr. Reid Hunt, pharmacologic laboratory. Research proposed: Continuation of an investigation of the toxicity of arsphenamin and analogous products and improved methods for manufacturing a safer and cheaper product. Columbia University, Department of Bacteriology, College of Physicians and Surgeons, New York City, under the direction of Dr. Hans Zinsser, professor of bacteriology, and with the assistance of Dr. Oscar Teague. Research proposed: Study of etiology of chancroids with special reference to bacteriology, diagnosis, and serum reactions.

DEATHS

CHARLES E. BARMM, M.D., aged 64 years, died at his home in Indianapolis, June 11. He was graduated from the Eclectic College of Physicians and Surgeons, Indianapolis, in 1893.

JAMES C. STEWART, M.D., formerly of Lebanon, died June 21, at his home in Kansas City, Mo., aged 69 years. He was graduated from the Kansas City Homeopathic Medical College in 1895.

CLAUDE H. ADDLEMAN, M.D., aged 26, an intern at the City Hospital, Indianapolis, since February, died at the hospital, June 16, following an attack of blood poisoning. Dr. Addleman was graduated from the Indiana University School of Medicine on June 1, 1920.

JOHN CALVIN FULTON, M.D., aged 75 years, a Civil War veteran, died June 22, at his home

in Bluffton. Dr. Fulton attended the Miami Medical College in Cincinnati in 1869 and 1870. He was a member of the Wells County Medical Society and the Indiana State Medical Association.

GEORGE F. CLINE, M.D., aged 56 years, died June 15, at the Southeastern Indiana Hospital, Craigmont. He was graduated from the University of Louisville Medical Department in 1893. Dr. Cline was a member of the Bartholomew County Medical Society and the Indiana State Medical Association.

JOHN D. SOURWINE, M.D., died May 27, at his home in Indianapolis, aged 68 years. He was graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1896. Dr. Sourwine was a member of the Marion County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better *Journal* for you.

DR. P. A. KENDALL, Crothersville, is in Chicago taking postgraduate work.

DR. E. L. HUME of New Bloomfield, Mo., has located at Milroy for the practice of medicine.

A LABORATORY and roentgen-ray equipment is to be added to St. Joseph Hospital, Mishawaka, at a cost of \$10,000.

DR. JOHN A. MARTIN has returned from Florida to open offices in the Hume-Mansur Building, Indianapolis.

DR. J. M. BILLMAN of Sullivan is to have his son, Dr. Beryl Billman, associated with him in the practice of medicine.

DR. BAKER of Indianapolis has removed to Carmel to be associated with Dr. K. C. Hershey in the practice of medicine.

DR. OLIVER H. KELSALL and Miss Dorothy May Dietzman, both of Louisville, were married Tuesday, June 22, 1920.

DR. JAMES NIBLICK of Indiana Harbor has been ill for several weeks from typhoid, and his condition is still serious.

THE regular meeting of the doctors and dentists of Fountain and Warren Counties was held June 17 at Williamsport.

DR. WILLIAM C. MYERS of Dana was married, June 4, to Miss Frema Myers of Danville, Ill. They are to reside in Dana.

SINCE April 11 women have been admitted to the Medical College of the University of Vermont on the same terms as men.

DR. AND MRS. O. G. PFAFF, Indianapolis, are visiting their son, who is a student in the Harvard Medical School in Boston.

DR. RICHARD STEPHENSON, West Lebanon, has repurchased the office and practice which he recently sold to Dr. Henderson.

DR. ANDREW R. WYATT, LaGrange, will be succeeded in his practice of medicine and surgery by Dr. Archie Jones, his nephew.

DR. B. H. COOK of Anderson underwent a surgical operation, June 14, at the St. John's Hospital, and is reported doing nicely.

KENTUCKY has established a bureau of trachoma and blindness as a part of the state board of health with an appropriation of \$7,500.

DR. SIMON FLEXNER of the Rockefeller Institute has been elected as an associate member of the French Society of Tropical Pathology.

THE new Winamac Sanitarium was opened on Monday, May 29. The sanitarium has a capacity of sixteen beds and is modern in every way.

THE Knight Commandership of the Order of St. Michael and St. George was recently conferred on Gen. W. C. Gorgas by King George of England.

THE nineteenth annual commencement of the Union Hospital Training School, Terre Haute, was held May 24, 1920. Eleven nurses received their diplomas.

GOVERNOR SMITH has vetoed the Ames bill for the regulation of the practice of chiropractic, which was passed recently by the New York state legislature.

DR. MELVILLE ROSS, recently discharged from military service, has returned to Indianapolis and opened offices in the Occidental Building, for the practice of medicine.

DR. W. I. FUGATE, for the past six and a half years secretary of the city board of health, Muncie, has resigned. He is to be succeeded by Dr. William C. Heilman.

DR. CHARLES J. BROCKWAY of Lafayette has been found guilty of involuntary manslaughter as a result of the trial held June 12. A motion for a new trial has been filed.

COMMENCEMENT exercises were held May 30 at the training school of the Protestant Deaconess Hospital, Indianapolis, when eleven nurses received their diplomas.

At the annual meeting of the Chicago Medical Society, held June 16, Dr. John S. Nagel was elected president and Dr. Hugh N. MacKechnie, secretary of the society.

At the last meeting of the Association of American Peroral Endoscopists, held in Boston, June 1, 1920, Dr. Daniel W. Layman, Indianapolis, was elected to membership.

DR. ALFRED HENRY of Indianapolis has gone to Saranac Lake, N. Y., to take the course in diagnosis and treatment of tuberculosis, which is offered by the Trudeau Sanatorium.

DR. C. M. JACKSON of Elizabethtown has been appointed coroner for Bartholomew County to succeed Dr. George F. Cline. Dr. Jackson is to assume his duties at once.

THE Goshen Hospital closed June 1 on account of lack of funds, and has remained closed throughout the month. The hospital has been operating at a loss ever since its inception in 1913.

DIPLOMAS were presented to fifty-one nurses June 9 at the annual commencement exercises of the Methodist Episcopal Hospital School for Nurses, at the Meridian Street M. E. Church, Indianapolis.

DR. JOHN S. RIGG of Indianapolis and Miss Elizabeth McAllister of Terre Haute were united in marriage, June 6, in Indianapolis. The couple will make their future home in Wichita, Kan.

THE first formal meeting of the Medical Advisory Board of the League of Red Cross Societies was held, July 5, at Geneva, Switzerland. Dr. Simon Flexner of New York represented the United States.

AT the annual meeting of the Fourth District Medical Society, held in Madison, May 25, Dr. Weaver of Greensburg was elected president and Dr. Charles E. Gillespie of Crothersville was elected secretary.

At a public meeting held, March 7, at Oxford University, it was decided to establish the Osler Institute of General Pathology and Preventive Medicine as a permanent memorial to the late Sir William Osler.

SIX young women received their diplomas at the annual commencement exercises of the Home Hospital Training School for Nurses, held Tuesday evening, June 15, at the Central Presbyterian Church, Lafayette.

DR. SAMUEL DODDS of Madison has been appointed superintendent of the Northern Indiana Hospital for the Insane to succeed Dr. Paul E. Bowers, who resigned recently to take charge of a government hospital in California.

WITH its June issue, *The Journal of the Illinois State Medical Association* is seventy years old. It was established in 1850, and has been the means of keeping a detailed record of the progress of medicine since that time.

HENRY T. GRIGGS of Goodland has given a site and \$45,000 toward the building of a hospital at that place. The hospital is to be maintained by the county if the plans of the committee having the matter in charge are realized.

Mrs. Morris H. Drake of Shelbyville has been appointed public health nurse of Shelbyville by the Shelby County Anti-Tuberculosis Society and the Shelby County Red Cross Society. She will take charge of her work on September 1.

DR. E. VERNON HAHN, who won the Ravdin gold medal for the highest scholarship in the 1920 graduating class of the Indiana University School of Medicine, has been appointed as an intern in the Robert W. Long Hospital for the coming year.

PLANS for the Fourth Roll Call of the American Red Cross, which is to take place between Armistice Day, November 11, and Thanksgiving Day, November 25, have been set forth by Frederick C. Munroe, general manager of the American Red Cross.

A GIFT of \$1,000,000 has been made to the Yale University endowment fund by the General Education Board of New York. The fund will be used for the development of the New Haven General Hospital through the medical school of the university.

PHYSICIANS from Kosciusko, Huntington, Allen and Noble Counties were the guests of the Whitley County Medical Society at a very enjoyable outing at Tri-Lakes, held June 8. A fine program and a banquet were enjoyed by the physicians attending.

THE sixteenth annual session of the Fourth District Medical Society was held May 25 at the Southeastern Indiana Hospital for the Insane, at North Madison. Following the scientific session at the hospital, a banquet was held at the Madison Country Club.

APPROXIMATELY 350 health officers from all over the state were in Indianapolis, June 2, attending the first of the two-day session of the annual school conducted by the state board of health at the Denison Hotel. An exceptionally fine scientific program was carried out.

THE members of the Phi Beta Pi fraternity held their annual alumni banquet, June 5, at the Columbia Club, Indianapolis. Officers for the association for this year are as follows: Dr. S. E. Earp, president; Dr. H. Wheeler, vice president; Dr. Station, secretary-treasurer.

DR. E. K. WESTHAFFER of the New Castle Clinic left, June 5, for New York City, where he will take postgraduate work in roentgen-ray and genito-urinary work. He will be gone three months, and after taking this course will return to New Castle to resume his work at the clinic.

By a majority vote of 1,148 it has been decided to erect a Vermilion County Hospital, to be located at Clinton. The proposition was to vote a sum not exceeding \$100,000 for the purchase or building of the hospital and to levy a tax annually for the maintenance of the hospital.

MAJOR-GEN. WILLIAM CRAWFORD GORGAS, former Surgeon-General of the United States Army, died in London, July 4, following an attack of cerebral hemorrhage suffered while en route to the west coast of Africa to head a sanitary commission of the Rockefeller Foundation.

NOTICE has been given that sealed proposals for the furnishing of materials for the construction of two additional wings to the Allen County Tuberculosis Hospital, and wing for nurses' home, will be received at the office of the auditor, Fort Wayne, until 10 o'clock a. m., on July 16, 1920.

TUESDAY, June 1, the doctors of Wells County, together with the doctors of Grant and Huntington Counties, were entertained by the Huntington County Medical Society, at a meeting in Warren. After an enjoyable 6 o'clock banquet, the evening was spent in round table discussion.

THE health officer of Stockton, Calif., has refused to honor a death certificate filed by J. C. Rule, an osteopath, showing that a 10 year old "infant" died after an operation for peritonitis and appendicitis. The health officer holds that an osteopath has no right to perform such an operation.

MISS FLORENCE WALTZ, formerly a supervisor at the Robert W. Long Hospital, and for some time connected with the free tuberculosis clinics in Indianapolis, has been appointed county tuberculosis nurse of Marion County. She will work under the auspices of the association, in cooperation with Sunnyside Sanatorium.

At the annual meeting of the Association of Military Surgeons of the United States, held recently in New Orleans, Assist. Surg.-Gen. John W. Kerr, U. S. P. H. S., was elected president and Col. James Robb Church, M. C., U. S. Army, Washington, D. C., was reelected secretary-treasurer and editor of the *Military Surgeon*.

THE trial of Klopp and Klopp, chiropractors, of Independence, ended in the conviction and fining of the defendants, when the jury found them guilty of practicing medicine without a license, on May 3. The charges were brought by Dr. F. L. Cook, health commissioner of Independence and chairman of the local board of health.

DR. HAROLD HATCH, superintendent of the Marion County Tuberculosis Sanitarium, "Sunnyside," conducted a clinic in the basement of the Columbus Public Library, June 16. The purpose of the clinic is to secure for the person who has been exposed to tuberculosis an early examination and advice concerning appropriate treatment.

THE Maryland School of Medicine and the Maryland State College of Agriculture have been combined under the name of The University of Maryland. The legislature has made an appropriation of \$42,500 each year for the medical school for the next two years, and an appropriation of \$203,000 has been made for equipment.

Two cats and two dogs shall be the limit of such household pets in St. Louis homes if an ordinance recently introduced in the board of aldermen passes; and chickens, geese, ducks, and other fowls are prohibited on any premises without a permit from the health department. These are measures calculated to protect the health of the people.

THE medical and surgical history of the World War is to be prepared by Surgeon-General of the Army, M. W. Ireland, and work is to begin at once. The first appropriation for this work was reduced, by Congress, to \$50,000, but with the provision that additional money will be provided from time to time to carry on this important work.

A THOUSAND dollar fellowship, one year at Teachers' College, Columbia University, for the study of modern health education in the elementary schools will be awarded by the Child Health Organization of America, 156 Fifth Avenue, New York, for the best graded plan and outline for interesting children in the establishment of health habits.

At the seventy-fourth annual meeting of the Ohio State Medical Association, held in Toledo, June 1 to 3, the following officers were elected:

President, Dr. Charles Lukens, Toledo; president-elect, Dr. Wells Teachnor, Columbus; president emeritus for one year, Dr. John C. Reeve, Dayton. Columbus was selected as the next place of meeting.

AN appropriation of \$3,500, to be used in the fight against the social diseases of the city, has been recently made by the Indianapolis city council. More than 900 cases have been reported since February, and the appropriation was necessary that the work might not be interrupted until the state and government comes to the aid of the clinic.

At the annual meeting of the American Association of Anesthetists, held April 25 and 26 in New Orleans, the following officers were elected: President, Dr. Joseph E. Lumbard, New York; vice presidents, Dr. J. L. Richardson, Boston, and Dr. Eleanor Seymour, Los Angeles; secretary, Dr. J. G. McMechan, Avon Lake, Ohio (reelected).

THE medical staff of St. Joseph's Hospital, Fort Wayne, gave a dinner at the Fort Wayne Country Club on June 25 honoring Dr. Miles F. Porter on the eve of his departure for Europe. Toasts were given by Drs. B. W. Rhamy, W. D. Calvin, L. Park Drayer, Ben P. Weaver, Miles F. Porter, Jr., and Albert E. Bulson, Jr., Dr. Porter responding.

DR. H. W. GREIST and family of Monticello left the first of July for Wales, Alaska, located on the Seward Peninsula. Dr. Greist will work under the direction of the Presbyterian Church, in the capacity of a medical missionary. He will ascertain the health and needs of the Eskimos, and will determine whether or not conditions justify the building of a government hospital there.

DR. MILES F. PORTER and wife of Fort Wayne sailed Thursday, July 1, with a large number of well known American surgeons, to attend the International Congress of Surgeons to be held in Paris. After the meeting of the Congress, Dr. and Mrs. Porter will visit some of the famous battle fields, and continue their trip through Italy and England, returning home about September 1.

At the thirty-second annual meeting of the American Pediatric Society, held in Highland Park, Ill., May 31 to June 2, the following officers were elected: President, Dr. John How-

land, Baltimore; vice president, Dr. Charles A. Fife, Philadelphia; secretary, Dr. Howard Childs Carpenter, Philadelphia; treasurer, Dr. Charles Hunter Dunn, Boston; recorder and editor, Dr. Oscar M. Schloss, New York City.

PHYSICIANS of Easton, Pa., have been urged by the mayor of the city to mark their cars with the emblem provided by the American Medical Association, in order that traffic officers may recognize them. It has been recognized in this city, as in many others, that it is impossible for a traffic officer to know all of the physicians or their cars. Consequently, it would be a great advantage to the physicians to have their cars marked.

CONSTRUCTION of five hospitals, costing \$10,000,000, for use by veterans of the World War, was authorized in a bill reported June 4 by the house of buildings committee. The measure specifies in a general way the location of the hospitals as follows: One in the region of the central Atlantic coast states, one on the Great Lakes, one in the north Pacific coast states, one in the Rocky Mountain states, and one in southern California.

At the annual meeting of the Medical Society of the State of California, held in Santa Barbara, May 11 to 13, Coronado was selected as the next place of meeting, and the following officers were elected: President, Dr. John C. Yates, Coronado; president elect, Dr. John H. Graves, San Francisco; vice presidents, Dr. William Duffield, Los Angeles, and Joseph H. Catton, San Francisco; secretary, Dr. Saxton T. Pope, San Francisco (reelected).

ACCORDING to figures published by the Association of Armenian Physicians, the following losses were sustained during the war: Armenian physicians massacred and killed, 67; died of exanthematous typhus, 52; Armenian pharmacists massacred and killed, 54; died of typhus or other diseases, 19; Armenian dentists massacred and killed, 10; died of typhus or other diseases, 4; Armenian medical students massacred, killed, or died of disease, 15.

THE annual meeting of the Sixth District Medical Society was held, May 29, at Shelbyville. The following scientific program was carried out: "The Gallbladder," by R. J. Morrow, Connersville; "Physiological Theory as to the Cause of Epilepsy," Dr. C. A. Marsh, Newcastle; "The Indications and Technic of

Blood Transfusion," Dr. W. D. Gatch, Indianapolis; "Protein Poisons with Cutaneous Manifestations," Dr. H. R. Alburger, Indianapolis.

A SYSTEMATIC effort to check the importation of narcotics into Shanghai, China, has been undertaken by the Antiopium Society. The importation into Shanghai has greatly increased in the last five years, the largest quantities being smuggled into Shanghai from the western province of Szechuen by way of Hankow, and from Fukien by way of Wenchow. The Antiopium Society has appealed to the customs and administration authorities in Shanghai for co-operation in its campaign.

THE following officers of the Medical Corps, U. S. Army, have been mentioned by the King of England in appreciation of their distinguished service in the field: Col. Christopher C. Collins; Col. George W. Crile, Cleveland; Col. Harvey Cushing, Boston; Col. Mathew A. Delaney, Col. Robert U. Patterson, Col. Harry L. Gilchrist, Col. James D. Fife, Col. Richard H. Harte, Philadelphia, and Lieut.-Col. Lucius L. Hopwood; also Miss Julia Stimson, superintendent of nurses, U. S. Army.

A CAMPAIGN to abolish child labor not merely by prohibiting employment but by providing suitable education, is being carried on or has been completed by twenty states, in cooperation with the Children's Bureau of the U. S. Department of Labor. The campaign is to be followed in the fall by a back to school drive to round up the children who fail to report at the opening of school, since the influence of vacation work in leading to permanent withdrawal from school has been strikingly shown.

THE average man contains the constituents found in 1,200 eggs, has iron enough to make four tenpenny nails, fat contents to make seventy-five candles and a good sized piece of soap, not to speak of a bowl of sugar. Considering that eggs are selling for 95 cents a dozen, matches at 6 cents a box, and candles for 5 cents each, \$582.84 is the actual worth of the constituents of a grown person, to say nothing of what the sugar he contains may be worth.—*Minnesota Public Health Association Journal*, Jan. 15, 1920.

A MAN is dead in Brooklyn as the result of the misreading of a prescription by a drug clerk. The prescription called for "laxol," but was misread "lysol" by the clerk. Accordingly,

a bottle of "lysol," which bore the usual poison label with skull and cross bones, was given to the patient, who died three hours after drinking it. The drug clerk is being held under \$10,000 bail. There is no excuse for prescribing "laxol" as the official aromatic castor oil of the National Formulary would answer every purpose served by the proprietary preparation.

THE state board of health of Indiana ranks sixth among the health boards of all states in the nation in efficiency, according to the results of a survey made by the American Medical Association, and announced by Dr. J. N. Hurty, secretary of the state board. Indiana obtained sixth place in the order of the states as to efficiency in the work, in spite of the fact that in Indiana the per capita expenditure yearly for health purposes is only 2.32 cents. Massachusetts was ranked first in efficiency by Dr. Chapin. The per capita expenditure in that state is 4.95 cents.

A SET of ancient Greco-Roman medical and surgical instruments, found two years ago near Kolophon, in Asia Minor, has been presented to the Archaeological Museum of Johns Hopkins University by William H. Buckler. The instruments, thirty-six in number, are all of bronze, with one exception. They were probably the property of some Roman physician living in Asia Minor in the first or second century A.D. The set included surgical knives and elevators, forceps, tenacula, a unique drill bow for use in injuries of the skull, scoops, probes and a cautery.

QUITE a number of cases of bubonic plague have been discovered in Vera Cruz, and all traffic by rail or steamship, with the exception of that over the railway to Jalapa, has been suspended in order to prevent a spread of the disease. Major A. R. Goodman, M. C., U. S. Army, attached to the American embassy at Mexico, announced, June 5, that the situation is not so serious as the reports state, and that the Mexican medical authorities are handling the situation efficiently and taking every precaution to prevent the plague from spreading to other parts of the country.

THE General Education Board of the Rockefeller Institute announces a gift of \$5,000,000 to the Rochester University to be used in conjunction with a second \$5,000,000 donated by George Eastman, for the founding of a school of medicine and dentistry. A second gift of \$1,250,000, with additional smaller sums, is to

be given the London University College and Hospital School for a building program, whereby the facilities of the college are to be extensively improved for the training of personnel and the setting of standards for health work throughout the British Empire.

SOME of the German exchanges publish week by week the current rate of exchange to be adopted by the physicians at watering places in charging foreigners for their services. The rate given by the Medizinische Klinik for May 9, just received, is as follows: "One hundred and forty-one marks for Americans; 130 marks for Argentinians; 51 marks for Belgians; 96 marks for Danes or Norwegians; 119 marks for the English; 46 marks for Finlanders; 34 marks for Italians; 117 marks for patients from Sweden; 134 marks for patients from Switzerland, and 126 marks for those from Spain."

IN the front hall of the Jefferson Medical College a bronze memorial tablet was erected by the class of 1919, bearing the following inscription: The Jefferson Medical College. The class of 1919 has erected this tablet to commemorate the military service of 1,187 commissioned officers of the Medical Corps of the Army and Navy, 431 enlisted men of the Students' Army Training Corps and an unknown additional number of other graduates and undergraduates of the Jefferson Medical College who, in the World War, served their country's cause on every field, to their own credit and the added glory of their Alma Mater.

AT the annual meeting of the Medical Society of the State of New York, held March 22-25, 1920, an extra per capita assessment of \$2 was levied to increase the amount in the treasury and the regular annual assessment was increased from \$3 to \$5. The House of Delegates decided to secure a full-time executive secretary; to elect a speaker and vice speaker of the house; recommended "the appointment by the court of experts when mental conditions were involved"; objected to further increase in educational requirements for entrance on the study of medicine, and resolved that "we are uncompromisingly opposed to compulsory health insurance and base opposition on the high ethical ground that compulsory health insurance is destructive of the best interests of the practice of medicine and of the medical profession, and of the public at large." Dr. J. Richard Kevin, Brooklyn, was elected president, and Dr. Edward Livingston Hunt, New York, secretary.

THE U. S. Public Health Service has issued a bureau circular regarding the use of arsenic preparations in the treatment of syphilis, in which it invites attention to the extensive exploitation through advertisements in professional journals and elsewhere, of various arsenic preparations which are sold with unwarranted claims as to their value in the treatment of syphilis. In the opinion of the bureau, the subcutaneous, intramuscular or intravenous use of arsenic in the treatment of syphilis should be confined to the arsphenamin group, as these agents are now of established value and are produced under the regulations of the Public Health Service. These agents are now manufactured by the following licensed firms: Dermatological Research Laboratories, 1720 Lombard Street, Philadelphia; H. A. Metz Laboratories, 122 Hudson Street, New York; Diarsenol Company, Inc., Buffalo; Takamine Laboratory, Clifton, N. J., and the Lowy Laboratory, Newark, N. J. Provision is made for the experimental use of any preparation under conditions which will make the results of the experiment available to others than the physician immediately concerned.

DURING June the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Abbott Laboratories: Benzyl Benzoate (Abbott); Elixir Benzyl Benzoate (Abbott); Tablets Benzyl Benzoate (Abbott).

Arlington Chemical Company: Pollen Extracts-Arlco: Aster, Birch, Cherry, Clover, Corn, Dahlia, Daisy, Dandelion, Dock, Elm, Goldenglow, Goldenrod, Hickory, June Grass, Locust, Maple, Narcissus, Oak, Orchard Grass, Poplar, Poppy, Red Top, Rose, Rye, Sunflower, Timothy, Walnut, Willow, Ragweed (*Ambrosia trifida*), Ragweed (*Ambrosia artemisiaefolia*).

Fritzsche Brothers, Inc.: Benzyl Benzoate (Fritzsche).

Gilliland Laboratories: Pertussis Bacillus Vaccine; Diphtheria Toxin-Antitoxin Mixture.

Heyden Chemical Works: Ichthyat.

Hynson, Westcott and Dunning: Whole Ovary-H. W. D.; Whole Ovary Tablets-H. W. D., 5 grains.

Lederle Antitoxin Laboratories: Antipneumococcus Serum (Polyvalent); Gonococcus Glycerol Vaccine; Pollen Antigen-Lederle (Fall Type).

AN international health conference has been held in London, at the request of the League of Nations, to consider the establishment of an International Health Office under the League. An informal conference was held last July, at which time provision was made for the later formal gathering which has recently been concluded. At this latter meeting a plan was drawn up to be submitted to an international conference which provides for the formation of an International Health General Committee, to consist at the outset of delegates appointed by all the governments represented on the Committee of the Office Internationale d'Hygiene Publique and of any other nations which are adherents of the League. The Office Internationale will form an important part of the new health organization. The general committee will sit only as occasion may require, though not less than once a year, but a much smaller executive committee will meet quarterly, with power to settle questions requiring urgent consideration. The office is to be advisory to the International Labor Office on health questions and will advise with the League of Red Cross Societies. The delegates to the conference were as follows: Chairman, Viscount Astor; United States, former Surgeon-General Rupert Blue; Great Britain, Sir George Newman and Dr. G. S. Buchanan, C.B., with Dr. Steegmann as technical advisor; France, M. Brisac, with M. Leon Bernard, M. Boujard, and M. Thiebault as technical advisors; Italy, Dr. Lutrario, Dr. Fornaciari, and Dr. Druetti; Japan, Dr. Yoneji Miyagawa, with Mr. Kakichi Kawarata as technical advisor; Office Internationale d'Hygiene Publique, Dr. Pettevin. There attended as additional members for discussion of typhus in Poland, Dr. Chodzko (vice minister of the Polish Ministry of Health) and Dr. Rajchmann.—*New York Medical Journal*, May 15, 1920.

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County	Secretary	Date
1.	Decatur,	C. R. Bird.....	Feb. 1, 1920
2.	Fayette,	R. H. Elliott.....	Feb. 1, 1920
3.	Franklin,	E. M. Glaser.....	Feb. 1, 1920
4.	Fulton,	A. E. Stinson.....	Feb. 1, 1920
5.	Jasper-Newton,	O. E. Glick.....	Feb. 1, 1920
6.	Jefferson,	O. A. Turner.....	Feb. 1, 1920
7.	Marshall,	Harry Knott.....	Feb. 1, 1920
8.	Posey,	John Ranes.....	Feb. 1, 1920

9.	Shelby,	F. E. Bass.....	Feb. 1, 1920
10.	Sullivan,	J. B. Maple.....	Feb. 1, 1920
11.	Union,	J. D. Shonwald.....	Feb. 1, 1920
12.	Warrick,	J. F. Samples.....	Feb. 1, 1920
13.	Washington,	Claude B. Paynter.....	Feb. 1, 1920
14.	Wells,	G. B. Morris.....	Feb. 1, 1920
15.	Whitley,	H. M. Egoft.....	Feb. 1, 1920
16.	Delaware-Blackford,	H. D. Fair.....	March 1, 1920
17.	Hancock,	C. H. Bruner.....	March 1, 1920
18.	Knox,	D. H. Richards.....	March 1, 1920
19.	Madison,	Doris Meister.....	March 1, 1920
20.	Monroe,	J. E. P. Holland.....	March 1, 1920
21.	Scott,	J. P. Wilson.....	March 1, 1920
22.	White,	H. B. Gable.....	March 1, 1920
23.	Marion,	Leslie H. Maxwell.....	April 1, 1920
24.	St. Joseph,	R. B. Dugdale.....	April 1, 1920
25.	LaGrange,	A. J. Hostetler.....	April 1, 1920
26.	Miami,	M. L. Wagner.....	April 1, 1920
27.	Steuben,	Mary Ritter.....	April 1, 1920
28.	Tippecanoe,	W. M. Reser.....	April 1, 1920
29.	Wabash,	L. O. Sholty.....	April 1, 1920
30.	Fountain-Warren,	A. M. Sullivan.....	May 1, 1920
31.	Henry,	W. H. Stafford.....	May 1, 1920
32.	Jay,	C. A. Paddock.....	May 1, 1920
33.	Montgomery,	A. L. Loop.....	May 1, 1920
34.	Vanderburgh,	William E. Barnes.....	May 1, 1920
35.	Bartholomew,	H. H. Kamman.....	June 1, 1920
36.	Dearborn-Ohio,	E. J. Libbert.....	June 1, 1920
37.	Huntington,	F. B. Morgan.....	June 1, 1920
38.	Vigo,	W. D. Asbury.....	June 1, 1920

INDIANA STATE MEDICAL ASSOCIATION

The Program Committee has announced the following preliminary scientific program for the annual session of the Indiana State Medical Association, to be held at South Bend, Sept. 22, 23 and 24, 1920:

General Meetings

THURSDAY A. M.

1. Tuberculosis of the Kidney:
 1. Pathology.....Virgil Moon, Indianapolis
 2. Early Recognition and Management from the Viewpoint of the Internist
Frank B. Wynn, Indianapolis
3. Differential Diagnosis (Slides)
H. O. Mertz, Indianapolis
4. Value of Roentgen-Ray Diagnosis
H. C. Beeler, Indianapolis
5. Surgical Treatment...H. G. Hamer, Indianapolis
Discussants: Charles Beall, Fort Wayne;
Charles Terry, South Bend

FRIDAY P. M.

1. Public Policy and Legislation, A. M. Sullivan, Attica
Discussants: E. M. Shanklin, Hammond;
William Wishard, Indianapolis
2. The Acute Abdomen...M. E. Boulden, Frankfort
Suture of Peripheral Nerves
Will C. Moore, Muncie
Mediastinal Tumor with Report of Case
W. D. Asbury, Terre Haute
Discussants: Louis Ross, Richmond; A. R. Kressler, Renesselaer; A. H. Arnett, Lafayette

Medical Section

THURSDAY P. M.

1. Student Health in Indiana University
J. E. P. Holland, Bloomington
Effect of Compulsory Military Education on Public Health.....C. E. Reed, Culver
Blood Chemistry as Applied to Clinical Medicine, with Demonstration of Methods and Results
J. O. Ritchie, Indianapolis

Malnutrition in the Schools....O. B. Nesbit, Gary
Discussants: Hugh Miller, South Bend; To be
supplied from Public Health Service later

2. Duty to the State in Regard to the Epileptic
W. D. Van Nuys, New Castle
Epilepsy.....Chester Marsh, New Castle
Discussants: C. F. Neu, Indianapolis; Fred Ter-
finger, Logansport

FRIDAY A. M.

1. Soft Parts as a Factor in Obstetrics
H. D. Fair, Muncie
Puerperal Eclampsia..William Moore, New Albany
Discussants: L. Parke Drayer, Fort Wayne; A.
M. Mendenhall, Indianapolis
2. Protein Sensitization...C. S. Bosenbury, South Bend
Discussants: A. G. H. Clowes, Indianapolis; Dr.
Turner, Indianapolis; C. A. Sellars, Hartford
City
3. Arthritis Deformans.....L. D. Reed, Hope
Roentgen Ray in Diagnosis of Mastoid Pathology
B. R. Kirklin, Muncie
Systemic Reaction of Roentgen Ray in Treatment
of Arteriosclerosis.....J. N. McCoy, Vincennes
Discussants: Charles Grandy, Fort Wayne; Grace
Line Homan, Laporte; Frank Wade, Howe
4. Cholecystitis.....G. G. Richardson, Van Buren
Discussants: Ben P. Weaver, Fort Wayne; C. S.
Bond, Richmond

Surgical Section

THURSDAY P. M.

1. A Consideration of the Association of Free Hydro-
chloric Acid and Gastric Motility in Gastric Dis-
eases.....Ivan E. Brenner, Winchester
Discussants: Goethe Link, Indianapolis; I. R.
Knepple, Kokomo
2. Cancer of the Breast: The Present Status of the
Subject with Especial Reference to Treatment
Miles F. Porter, Fort Wayne
Discussants: H. O. Bruggeman, Fort Wayne;
Willis D. Gatch, Indianapolis; J. Rilus East-
man, Indianapolis; Ed. Clark, Indianapolis
3. Pelvic Lymphangitis....Carl Habich, Indianapolis
Discussants: Walter J. Baker, South Bend; H. W.
McDonald, New Castle
4. Infections of the Hand..Frank G. Jackson, Muncie
Discussants: J. C. Sluss, Indianapolis; C. S. Stolz,
South Bend
5. Treatment of the Prostate
Frank Crockett, Lafayette
Discussants: Frank Jett, Terre Haute; John
Fleming, Elkhart

FRIDAY A. M.

1. Surgery of the Gallbladder
Luther Williams, Indianapolis
Discussants: Charles Marvel, Richmond; William
Davidson, Evansville
2. Rupture of the Intestines....H. H. Martin, Laporte
Discussants: H. A. Duemling, Fort Wayne; J. B.
Berteling, South Bend
3. The Pathology of the Rectum
Bayard Keeney, Shelbyville
Discussants: C. B. Ruschli, Lafayette; A. B.
Graham, Indianapolis
4. Silver Wire in Vesicovaginal Fistula
Joseph Rilus Eastman, Indianapolis
Discussants: Tom Jones, Anderson; Paul J.
Barcus, Crawfordsville
5. Diagnosis and Treatment of Diseases and Injuries
of the Spine.....G. D. Marshall, Kokomo
Discussant: E. B. Mumford, Indianapolis

Eye, Ear, Nose and Throat Section

THURSDAY P. M.

1. Chairman's Address...J. R. Newcomb, Indianapolis
2. Incipient Deafness...C. H. McCaskey, Indianapolis
Discussant: G. W. Spohn, Elkhart
3. The Indications for Operation in Acute Mastoid
Disease.....G. H. Mundt, Chicago
Discussant: W. S. Tomlin, Indianapolis
4. Reminiscences of Ophthalmology
J. O. Stillson, Indianapolis

FRIDAY A. M.

1. The Surgical Treatment of Acute Tonsillitis
A. R. Simon, Laporte
Discussant: D. O. Kearby, Indianapolis
2. Penetrating Eye Injuries....C. J. Adams, Kokomo
Discussant: W. A. Hollis, Hartford City
3. Submucous Resection of the Nasal Septum
K. T. Brown, Muncie
Discussant: E. J. Lent, South Bend
4. Simple Glaucoma: Its Early Recognition and Treat-
ment.....Albert E. Bulson, Jr., Fort Wayne
Discussant: Joel Whitaker, Indianapolis

FIRST DISTRICT

Pursuant to a call by District Councilor Dr. J. Y. Welborn, the First District Medical Society held a meeting at the Y. M. C. A. Building, Evansville, at 7 p. m., May 25, for the purpose of reorganization, Dr. A. M. Hayden presiding.

Dr. W. E. McCool read a letter from Dr. Jett on compulsory health insurance, urging the cooperation of physicians and medical organizations in fighting such legislation, and made a motion that resolutions be adopted by the society condemning such legislation. The president appointed the following committee: Dr. W. E. McCool, Dr. H. C. Ruddick and Dr. J. Y. Welborn, who presented the following resolution:

Resolved, That what is known as compulsory health insurance is a detriment to the laity and the medical and surgical profession; that it is class legislation and deprives patient and physician of equal privileges and would lower the efficiency of the profession; we believe it to be socialistic and un-American.

This resolution was adopted by the unanimous vote of the society.

The president appointed as committee on time of meeting and program for next meeting, Dr. H. C. Ruddick, Dr. W. E. McCool and Dr. L. Brose, and as a committee on reorganization and by-laws, Dr. J. Y. Welborn, Dr. W. S. Ehrich, Dr. J. N. Jerome, Dr. C. H. Fullenweider, Dr. James Montgomery, Dr. Guy Hoover, Dr. W. H. Muelchi, Dr. A. B. Thompson and Dr. G. B. DeTar.

There being no scientific program prepared for this meeting, the society adjourned.

H. G. WEISS, Secretary.

TIPPECANOE COUNTY

Meeting of April 27, 1920

The Tippecanoe County Medical Society met for its regular monthly meeting and luncheon at the Fowler Hotel College Inn, April 27, at 6:15 p. m. The address of the evening was by Prof. Stanley Coulter of Purdue University on "The Laboratory and the Physician."

Abstract: Changes in biology necessitates new lines of investigations. The changes in forests and drainage and changes in civilization with all of its read-

justments produce changes in flora and fauna and this demands readjustments of past knowledge to fit new conditions, or old methods must be changed to fit these new circumstances.

The laboratory must assist the physician by doing those things which he, as a busy man, has not the time and equipment to do; namely, assembling data obtained through experimentation and investigation. The laboratory is not the perfect and all important thing but its function is to assist the physician. It cannot solve all his problems and make his diagnoses, but it can confirm.

This is illustrated by influenza—the great unsolved problem confronting the physician and civilization. The medical fraternity at the beginning of the recent epidemic thought it knew a whole lot about influenza, because from previous epidemics the laboratory said the causative factor was the Pfeiffer bacillus, but by the time the recent epidemic was over the physician, from clinical evidence, had learned that he had known nothing and that the laboratory was wrong as to causative findings.

The virulence of most infections depends on the lowered resisting powers of the host but the influenza infection seems to gather its momentum by the virulence of its infecting organism. The healthy and strong being especially prone to its onslaught. Thus, in the case of influenza, the vigor of the germs and not the lowered resisting powers of the body seems to have been the great factor that made its progress invincible.

After the physician by his study has presented the clinical picture then the laboratory through ramifications of technic and scientific experimentation finds the specific cause and from this develops preventive or curative agents, as antitoxins and serums.

The laboratory is the great clearing house for the development of therapeutic agents, its conclusions being arrived at by means of innumerable experiments and collection of data which was first started by the picture presented by the clinical study made by the medical profession. The laboratory has yet lots of problems to solve from clinical pictures. For instance, the etiology of cancer may yet be solved by painstaking experimental work in the laboratory.

The medical profession of today cannot be thoroughly scientific without the assistance of the laboratory, but the laboratory must not be developed at the expense of the patient but its work must depend on the clinical diagnosis; in other words, the laboratory must start at the clinical diagnosis and work up to the patient instead of starting at the patient and working down to the diagnosis.

In this day the practitioner cannot rely on his experience alone as of former times, but in these complex times every physician must be in touch with a well equipped laboratory and make use of its findings; but he must not let the laboratory findings dim his clinical study.

The well equipped laboratory is an effective weapon of the physician. It is an adjunct but cannot take the place of the clinical picture. The laboratory is the guide post to point out the way which the clinical study has constructed.

DISCUSSION

Dr. Pyke: The present day physician makes the mistake of relying too much on the laboratory findings instead of first making a thorough clinical study.

Dr. McClelland: From experience in the roentgen-ray laboratory I think that the physician should first study his case thoroughly enough in order to send his tentative diagnosis along with the patient to the laboratory. The roentgen ray should be used only to confirm the clinical diagnosis.

Dr. Hunter: The laboratory findings are only a method of eliciting symptoms.

Under clinical cases, Dr. Crockett reported a case of severe hematuria.

Dr. Shafer reported a four months' pregnancy aborting with placenta retained for three weeks without developing any infective symptoms.

Dr. Thompson reported a similar case in which the placenta was retained for ten or twelve weeks with no symptoms. He also reported a case of right hemiplegia with right facial paralysis and left side restlessness. This case had a history of being a pop and Jamaica ginger fiend. Laboratory findings were: Leukocytes, 18,000; Wassermann ++++. Specific treatment instituted and awaiting results.

Dr. Hunter reported finding diphtheria germs in at least 25 per cent. of scarlet fever throats, but the series were not great enough to make a full report.

Dr. Reser reported a severe case of tracheal diphtheria complicating measles. This was in the Children's Home. In culturing fifty-six throats three carriers were found.

Dr. Schreiber reported two unusual clinical manifestations in syphilitic cases.

Dr. Pyke reported that from his own investigations he found 50 to 60 per cent. of township cases were syphilis—all ages from 1 to 90.

Dr. Campbell moved that the president appoint a committee of three to confer with the county commissioners with regard to submitting to the vote of the people the proposition of building a tuberculosis hospital. This motion being carried the chair appointed Dr. Campbell as chairman and gave him the power to select the other two members. Dr. Campbell chose Professor Coulter and Dr. Shafer.

Dr. Kern announced that the county antituberculosis society had secured a nurse to do county work, her services to begin July 1.

Dr. Shafer, who alone constituted the committee on physician telephone exchange, reported that thirty-six members had signed to join the service and that A. J. DeLong, a capable and worthy cripple, had agreed to do the work for the price of \$1 as membership fee, and \$1 per month per member, payable quarterly, at the middle of the first month of the quarter. The service to commence May 1, 1920. He reported that Telephone Manager Cuppy had shown a willingness to help establish such an exchange by making it a routine rule that both information and the operators should inform themselves of such exchange and refer all unanswered doctors' calls to said exchange.

Dr. Hunter, on inquiry, reported that he had been furnished only a few specimens of milk recently. That the specimens which had been furnished had been examined and found to be below standard as to quality, but that he had not found any adulterations as formerly.

(As explanatory I will state that the milk proposition in Lafayette had reached the point where it was unendurable. Milk inspection as practiced by political appointees, unqualified as to the requirements necessary, is a mere farce. Milk corporations holding legal

certificates of purity and flagrantly advertising themselves as producers of the finest quality of milk, were at times serving a product that contained 1 dram of chalk to 6 c.c. of fluid and the same sample was adulterated by some kind of foreign oil or fat so that it would pass the fat test. Not only was it grossly adulterated by these crude and ancient methods, but some samples were also heavily contaminated with colon bacilli. The general public had been laboring under the impression that their welfare had been protected. This false security was worse than no protection at all. Our society has a secret committee collecting samples to be submitted to the laboratory and the quality is much improved.)

Adjourned.

Meeting of May 28, 1920

Regular meeting of Tippecanoe County Medical Society was held with luncheon at Hotel Fowler, Lafayette, May 28, 1920, there being twenty-eight members present.

The following clinical cases were reported:

Dr. Bauer reported a case, male, aged 50, with cardiac disturbance with no causative physical findings. A positive Wassermann was found; specific treatment instituted with prompt improvement of condition.

Dr. Crockett: Case of frequent micturition, slightly cloudy urine, progressively growing worse, but no pain. Bacillus tuberculosis found in urine and cystoscopy showed typical tubercles.

Dr. VanReed: Case of child 10 months, measles eruption, no mouth or throat sign, no eye symptoms and but slight cough.

Dr. Driscoll: Case of appendectomy for chronic condition. Did well for eight days; then suddenly died; embolism.

Dr. Kern: A case of pregnancy with marked albuminuria and such marked edema that cesarean section had to be performed. Albumin and blood pressure slowly getting better for two weeks, when suddenly albuminuria jumped up with onset of convulsions, dying in the second one.

Dr. Mitchell: Two cases of pregnancy of 6 and 5 month each, operated successfully and pregnancy continuing to term.

Drs. Hunter and Biddle: A case of chronic pedunculated pure lipoma, size of hen's egg in man's throat at base of one of the pillars. Been there for years, but had never confided his ailment to any one. Operated and doing nicely.

The auditing committee reported the treasurer's book correct, and in their report congratulate the society for the fifteen years of efficient service which Treasurer Hupe had rendered.

Dr. A. B. Coyner of Lafayette was elected to membership.

The paper of the evening was by Dr. M. M. Lairy on "Some Phases of Blood Pressure."

Synopsis: Blood pressure today is a landmark of pathology. No diagnosis complete without it. It is a method of determining the measure of circulatory efficiency. Whenever systolic is 160 or more or 100 or less, or diastolic 100 or more, there is something pathologically wrong. Therapeutics must be directed to remove the cause of abnormal blood pressure instead of only relieving symptoms. Blood pressure and its significance was first worked out by medical departments of life insurance companies, and these companies are still leading in original investigations. At first, investigation was directed to hypertension; now

hypotension is equally recognized. At first, systolic readings were alone studied, but now diastolic is considered as of more significance. But clinical study should include both, along with the resulting pulse pressure.

Systolic of 150 to 155 is considered dangerous from an insurance standpoint and 160 as beyond considering at all. The average systolic at the age of 20 is 120 and increases at a definite ratio as age advances. The normal can vary from this average, 12 up or down or 12 per cent. up or down. Borderline cases demand great care and study. The ratio of pulse pressure, diastolic and systolic, are as 1-2-3: that is, at the age of 20 years they are, respectively, 40-80-120. Variation of diastolic range is not accepted as yet. Its average is 75 to 90 in adults. Its variation cannot be regulated by the 12 per cent. standard as in the systolic. Present-day readings are more valuable than formerly because of perfection of recent methods of taking blood pressure.

DISCUSSION

Dr. Westfall: Systolic varies much according to living conditions or as the results of treatment.

Dr. Driscoll: Is high pulse pressure more dangerous than high systolic?

Dr. Lairy: High pulse pressure indicates an over-working heart, while high systolic may be a variation due to some trivial or temporary cause.

Dr. Rhomberger: Lowering of diastolic during anesthesia indicates approaching shocks, a signal before other symptoms are present. Diastolic less than 80 and pulse 120 or more, means impending danger, and operation should be speedily terminated unless this alarming condition is removed.

Dr. Bauer: Hypotension today is coming to be considered as being of more significance than hypertension.

Dr. Lairy: Diastolic readings are the more stable.
Adjourned. W. M. RESER, Secretary.

BOOK REVIEWS

A TEXT-BOOK OF UROLOGY IN MEN, WOMEN AND CHILDREN. Including Urinary and Sexual Infections, Urethroscopy and Cystoscopy. By Victor Cox Pedersen, A.M., M.D., F.A.C.S. Illustrated with 362 engravings, of which 152 are original, and 13 colored plates. 989 pages. Lea & Febiger.

The title of this book does not conform to the contents. It is difficult to understand why it should have been entitled a work on urology when only a short chapter of twenty-one pages at the end of the volume is devoted to diseases of the prostate and practically nothing said of hypertrophy of the prostate and the major relationship which its surgical treatment bears to modern urology. Surgery of the kidney is dealt with quite as sparingly, although considerable attention is given to the diagnosis of renal tuberculosis and renal differentiation. Gonorrhea, stricture, diseases of the seminal vesicles and the many complications resulting therefrom are very fully and interestingly discussed and much of value is given for the benefit of the venerealist and those whose work is chiefly limited to office and dispensary diagnosis and treatment. No effort is made to cover the subject of syphilis. As a work on gonorrhea

and its complications and the technic of cystoscopy and ureteral catheterization and minor office surgery of the external genitals, it has considerable value, but it is not a textbook on urology, as the title indicates, and is entirely lacking in helpful suggestions on the major surgery in this department. The arrangement of the text does not follow the usual methodical and consecutive form which is customary in such works, and if it is to conform to the title, it will have to be entirely rewritten and much of the prolonged descriptions of simple technic abbreviated, and surgery of the prostate, bladder and kidneys will have to be added. It is difficult to understand how an author who is so highly respected and whose ability is so well recognized, could have written this book and given it the title it bears.

UROLOGY. Diseases of the Urinary Organs; Diseases of the Male Genital Organs; The Venereal Diseases. By Edward L. Keyes, Jr., M.D., Ph.D., Professor of Urology, Cornell University Medical College; Surgeon to St. Vincent's and Urologist to Bellevue Hospital. With 204 illustrations in the text and 18 plates, 4 of which are colored. D. Appleton & Co.

The rewriting of the subject of cystotomy, radiography, renal function and infection has been necessary in the latest edition of this work because of the complete revision and advance of these subjects in the last decade. This is true of prostatic surgery and syphilis, and the present knowledge of these conditions is most graphically and methodically presented by the author in a work that may justly be regarded as the best single volume textbook for specialists and general practitioners which is available. This book presents the experience and authorship of two generations, beginning with the work by Van Buren and Keyes in 1874, and the later issue of the same by Edward L. Keyes, Sr., supplemented by several editions and ending with the present volume by Edward L. Keyes, Jr., which is appropriately dedicated "to my beloved father." It is profusely illustrated, and the illustrations are practical and well selected. The pathology, diagnosis, treatment and surgery of the genito-urinary organs is illuminated and helpfully presented by the vast experience and scholarly attainments of the author. Surgery of the external genitals, the prostate, the bladder, the ureters and the kidneys is presented quite fully, and an added chapter on syphilis condenses the author's views contained in his former excellent volume on syphilis, and all are brought up to date. The work is not only deserving of careful reading, but is a real necessity for urologists and general practitioners.

AN OUTLINE OF GENITO-URINARY SURGERY. By George Gilbert Smith, M.D., F.A.C.S., Genito-Urinary Surgeon to Outpatients, Massachusetts General Hospital. 12mo of 301 pages, with 71 illustrations. Cloth, \$2.75 net. W. B. Saunders Company.

As the preface indicates, this is intended as a handbook for general practitioners, emphasizing important points in symptomatology, pathology and diagnosis of genito-urinary diseases. It is well printed, well illustrated and has orderly arrangement. It includes a chapter on instrumentation, endoscopy and cystoscopy and another on urinary antiseptics and urinalysis, with description of methods of detecting tubercle bacilli, gonococci and the differentiation of other bacilli, together with the method of making functional renal tests. The surgical part of the work is limited to minor surgery, but the value of differential ureteral catheterization and reno-ureteral radiography is em-

phasized and described. The closing chapter is on impotence and sterility. The book shows that the author has had a wide experience, and the descriptions give a practical and clear conception of the work presented. It is not only of value to the general practitioner, but is worthy a place in the library of specialists.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1920, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

CELLU FLOUR.—A specially pure cellulose in the form of flour. It is used as a means of filling out reduced diets, as in the Allen treatment for diabetics. It satisfies hunger without furnishing nourishment. Cellu Flour, after admixture with bran, baking powder, eggs, "India gum," or liquid petrolatum in varying proportions, may be used for the preparation of imitation bread, muffins, etc. Dietetic Cellulose Company, Chicago.

DIAPROTEIN PREPARED CASEIN FLOUR.—Casein, to which has been added 4 per cent. of a leavening mixture. It is employed in cases, such as diabetes, etc., in which carbohydrates are contraindicated. Diaprotein Prepared Casein Flour is adapted for the preparation of bread, cakes, etc. Diaprotein Company, Chicago.

ANESTHESIN-ABBOTT.—A brand of benzocaine (see New and Nonofficial Remedies, 1920, p. 33) complying with the N. N. R. standards. The Abbott Laboratories, Chicago (*Jour. A. M. A.*, June 5, 1920, p. 1577).

POLLEN EXTRACTS-ARLCO.—Liquids obtained by extracting the proteins from the pollen of various species of plants. For a discussion of the actions, uses and dosage of pollen extracts see New and Nonofficial Remedies, 1920, p. 226. Each of the Arlco products listed below is marketed in sets of four vials representing graduated concentrations: 1:10,000, 1:5,000, 1:1,000 and 1:500, respectively; also in concentrated solution in capillary tubes for diagnostic tests. For hospital use the diagnostic solution is supplied in 1 Cc., 2 Cc. and 3 Cc. containers.

Aster Pollen Extract-Arlco, from pollen of *Aster multiflorus* (?).

Birch Pollen Extract-Arlco, from pollen of *Betula populifolia*.

Cherry Pollen Extract-Arlco, from pollen of *Prunus species*.

Clover Pollen Extract-Arlco, from pollen of *Trifolium species*.

Corn Pollen Extract-Arlco, from pollen of *Zea mais*.

Dahlia Pollen Extract-Arlco, from pollen of *Dahlia variabilis*.

Daisy Pollen Extract-Arlco, from pollen of *Crysanthemum leucanthemum*.

Dandelion Pollen Extract-Arlco, from pollen of *Taraxacum officinale*.

Dock Pollen Extract-Arlco, from pollen of *Rumex acetocella*.

Elm Pollen Extract-Arlco, from pollen of *Ulmus americana*.

Goldenglow Pollen Extract-Arlco, from pollen of *Rudbeckia laciniata*.

Goldenrod Pollen Extract-Arlco, from pollen of *Solidago species*.

Hickory Pollen Extract-Arlco, from pollen of *Carya alba*.

June Grass Pollen Extract-Arlco, from pollen of *Poa pratensis*.

Locust Pollen Extract-Arlco, from pollen of *Robinia pseudacacia*.

Maple Pollen Extract-Arlco, from pollen of *Acer rubrum*.

Narcissus Pollen Extract-Arlco, from pollen of *Narcissus species*.

Oak Pollen Extract-Arlco, from pollen of *Quercus species*.

Orchard Grass Pollen Extract-Arlco, from pollen of *Dactylis glomerata*.

Poplar Pollen Extract-Arlco, from pollen of *Populus balsamifera*.

Poppy Pollen Extract-Arlco, from pollen of *Papaver somniferum*.

Ragweed Pollen Extract-Arlco, from pollen of *Ambrosia trifida*.

Ragweed Pollen Extract-Arlco, from pollen of *Ambrosia artemisiaefolia*.

Red Top Pollen Extract-Arlco, from pollen of *Agrostis alba*.

Rose Pollen Extract-Arlco, from pollen of *Rosa rugosa*.

Rye Pollen Extract-Arlco, from pollen of *Secale cereale*.

Sunflower Pollen Extract-Arlco, from pollen of *Helianthus annuus*.

Timothy Pollen Extract-Arlco, from pollen of *Phleum pratense*.

Walnut Pollen Extract-Arlco, from pollen of *Jugland nigra*.

Willow Pollen Extract-Arlco, from pollen of *Salix fragilis*.

Arlington Chemical Company, Yonkers, N. Y.

ANTIPNEUMOCOCCUS SERUM (POLYVALENT) TYPES I, II and III.—An antipneumococcus serum (see New and Nonofficial Remedies, 1920, p. 269) prepared by immunizing horses with dead and living pneumococci of the three fixed types and standardized against Type I culture. Marketed in double ended vials containing 50 Cc. each, with needle and tubing; also in bottles of 100 Cc. Lederle Antitoxin Laboratories, New York.

PERTUSSIS BACILLUS VACCINE.—A pertussis bacillus vaccine (see New and Nonofficial Remedies, 1920, p. 285) prepared from several strains of pertussis bacillus (Borget-Gongou). Marketed in packages of four syringes containing 250, 500, 1,000 and 2,000 million killed bacteria, respectively; in packages of four ampules containing 250, 500, 1,000 and 2,000 million killed bacteria, respectively; also in 5, 10 and 20 Cc. vials containing 2,000 million killed bacteria per cubic centimeter. Gilliland Laboratories, Inc., Ambler, Pa. (*Jour. A. M. A.*, June 26, 1920, p. 1779).

PROPAGANDA FOR REFORM

CHAULMOOGRA PREPARATIONS AND SODIUM MORRHUATE.—Chaulmoogra oil and preparations made from it are at present extensively employed and seem to produce amelioration in the majority of lepers to whom it has been administered persistently. Investigation has shown that chaulmoogra oil contains bactericidal substances that are one hundred times more active than phenol, and that this bactericidal action is specific for the acid fast group of bacteria to which the causative organism of leprosy belongs. The product is inactive against all other organisms studied. On the other hand, it has been shown that sodium morrhuate and the fatty acids of cod liver oil do not have a similar action in tuberculosis which is also due to an acid fast bacterium. The value of chaulmoogra preparations in tuberculosis remains to be

demonstrated, and their clinical trial should await their experimental investigation. The indiscriminate use of drugs in tuberculosis may arouse false hopes and may not be without danger to the patient (*Jour. A. M. A.*, June 5, 1920, p. 1578).

SYRUP LEPTINOL.—The Council on Pharmacy and Chemistry reports that Syrup Leptinol (formerly called Syrup Balsamea) is inadmissible to New and Nonofficial Remedies, first, because the manufacturer failed to give the profession information either in regard to the amount of the potent ingredient or the method of determining its identity and uniformity; secondly, because of the unwarranted recommendation for its use in such infectious diseases as pneumonia and epidemic influenza and the lack of satisfactory supporting evidence of the alleged therapeutic efficacy in other diseases; and thirdly, because the recommendation for its use appearing on and in the trade package constitutes an indirect advertisement to the public. Syrup Leptinol is marketed by the Balsamea Company of San Francisco. It is a balsamic syrup made from an unclassified species of *Leptotaenia* (a plant belonging to the parsnip family) which grows in Nevada. No evidence was presented to show that it had the remarkable properties ascribed to it by the Balsamea Company. The clinical reports which were reported were little more than chance observations and lacked all control (*Jour. A. M. A.*, June 5, 1920, p. 1590).

WARNING AGAINST UNTRIED MEDICAMENTS.—The United States Public Health Service has issued a circular regarding the use of arsenic preparations in the treatment of syphilis, in which it invites attention to the extensive exploitation of various arsenic preparations which are not related to the arsphenamin group. It is held that the subcutaneous, intramuscular or intravenous use of arsenic in the treatment of syphilis should be confined to the arsphenamin group, as these agents are now of established value and are produced under the supervision of the Public Health Service (*Jour. A. M. A.*, June 12, 1920, p. 1654).

WHAT IS THE THERAPEUTIC VALUE OF THE HYPOPHOSPHITES?—A research conducted by the Council on Pharmacy and Chemistry shows: There is no reliable evidence that they exert a physiologic effect. It has not been demonstrated that they influence any pathologic process. They are not foods. If they are of any use, that use has not been discovered. The hypophosphites were introduced into medicine by Churchill, who advanced the theory, long since discarded, that the so-called tuberculosis diathesis was due to a phosphorus deficiency. It is now known that little phosphorus, if any, is assimilated from hypophosphites—far less than from phosphorus compounds of ordinary foods. As a result of the power of advertising, many physicians still prescribe hypophosphate combinations (*Jour. A. M. A.*, June 12, 1920, p. 1661).

MORE MISBRANDED NOSTRUMS.—The following "patent" medicines have been the subject of prosecution by the federal authorities, chiefly because the therapeutic claims made for them were false: Sealeaf Emulsion, an emulsion of cod liver oil and malt extract; Green Mountain Herb Tea, and Sabine's Indian Vegetable Tea, consisting essentially of senna, fennel, elder flowers, anise, triticum, sassafras, American saffron, coriander, licorice root, butternut bark, buckthorn and Epsom salt; Sabine's Indian Vegetable Cough Balsam, consisting essentially of alcohol, chloroform, tar, resin, sugar and traces of alkaloids; Bovimina, apparently a meat extract; Fruit-a-Tives, containing essentially extracts of aloes, nux vomica and cinchona bark; Anticalculina Ebrey, consisting

(Continued on Adx. p. 18)



PITUITARY LIQUID

THE product is of standard strength. The package is dated. The doctor knows. He doesn't trust to luck.

It is Posterior Pituitary Active Principle in isotonic salt solution and is without preservatives.

$\frac{1}{2}$ c. c. ampoules (small dose) are labeled, "Obstetrical and Surgical."

1 c. c. ampoules (full dose) are labeled, "Surgical and Obstetrical."

Either in an emergency.

Literature on request

ARMOUR AND COMPANY
CHICAGO

SAVE MONEY ON YOUR X-RAY SUPPLIES

Get Our Price List and Discounts on Quantities Before You Purchase

HUNDREDS OF DOCTORS FIND WE SAVE THEM FROM 10% TO 25% ON X-RAY LABORATORY COSTS

AMONG THE MANY ARTICLES SOLD ARE

- X-RAY PLATES.** Three brands in stock for quick shipment. PARAGON Brand, for finest work; UNIVERSEAL Brand, where price is important.
- X-RAY FILMS.** Duplitzed or Double Coated—all standard sizes. X-Ograph (metal backed) dental films at new, low prices. Eastman films, fast or slow emulsion.
- BARIUM SULPHATE.** For stomach work. Finest grade. Low price.
- COOLIDGE X-RAY TUBES.** 5 Styles. 10 or 30 milliamp.—Radiator (small bulb), or broad, medium or fine focus, large bulb. Lead Glass Shields for Radiator type.
- DEVELOPING TANKS.** 4 or 6 compartments stone, will end your dark room troubles. 5 sizes of Enameled Steel Tanks.
- DENTAL FILM MOUNTS.** Black or gray cardboard with celluloid window or all celluloid type, one to eleven film openings. Special list and samples on request. Price includes your name and address.
- DEVELOPER CHEMICALS.** Metol, Hydroquinone, Hypo, etc.
- INTENSIFYING SCREENS.** Patterson, TE, or celluloid-backed screens. Reduce exposure to one-fourth or less. Double screens for film. All-mental Cassettes.
- LEADED GLOVES AND APRONS.** (New type glove, lower priced.)
- FILING ENVELOPES** with printed X-Ray form. (For used plates.) Order direct or through your dealer.



If You Have a Machine Get Your Name on Our Mailing List

GEO. W. BRADY & CO.

782 So. Western Ave. CHICAGO

Worth Writing for
and
Trying



FOR INFANTILE DIARRHEA

50

**BULGARA
TABLETS**

And Literature

**Hynson,
Westcott & Dunning**
BALTIMORE, MARYLAND

(Continue from p. 258)

essentially of alcohol, colchicin, ammonium salts, vegetable extractives and water; McDowell Ginseng Bitters, a solution of plant extract, containing small quantities of glycerin and a zinc salt (*Jour. A. M. A.*, June 12, 1920, p. 1661).

QUALITY OF ACETYSALICYLIC ACID.—The following brands of acetylsalicylic acid have been found of satisfactory quality and are in New and Nonofficial Remedies: Acetylsalicylic Acid-Heyden, Acetylsalicylic Acid-M. C. W., Acetylsalicylic Acid-Merck, Acetylsalicylic Acid (Aspirin)-Monsanto, Acetylsalicylic Acid-P. W. R., Acetylsalicylic Acid-Squibb, and Aspirin-L. and F. An examination made in the A. M. A. Chemical Laboratory two years ago showed that the product supplied as acetylsalicylic acid was of equal quality with the German made Aspirin Bayer. The Aspirin Bayer now made in America and exploited with misleading claims is controlled by the Sterling Products Company, which sells cascabels, dandereine, etc. (*Jour. A. M. A.*, June 12, 1920, p. 1664).

FORMITOL TABLETS.—In a report of the Council on Pharmacy and Chemistry, it was stated that Formitol Tablets of the E. L. Patch Company contained formaldehyd (or paraformaldehyd) and some hexamethylenamin, and that the formaldehyd (or paraformaldehyd) had been produced by the decomposition of the hexamethylenamin originally present in the tablets. The Council now reports that the Patch Company declares that no hexamethylenamin is used in the manufacture and that, therefore, that which was found must have been produced from the formaldehyd and ammonium chlorid in the tablets. The Council further reports that a printed sheet received from the Patch Company conveyed the information that Formitol Tablets contained ammonium chlorid, benzoic acid,

citric acid, guaiac, hyoscyamus, menthol, paraformaldehyd and tannic acid, but gave no information as to the amounts of any of the ingredients except that each tablet was declared to represent 10 minims of a 1 per cent. formaldehyd solution. Because of the non-quantitative, and, therefore, meaningless "formula," the A. M. A. Chemical Laboratory made an analysis of the tablets. The analysis indicated that the combined weight of all the claimed active ingredients is less than 1 grain per tablet! Formitol Tablets furnish a good illustration of some well established truths: 1. "Formulas" that are nonquantitative are valueless or worse than valueless. 2. The fact that a manufacturer puts certain drugs in a mixture is no proof that these drugs are there when the mixture reaches the patient. 3. Complex mixtures should be avoided. It is absurd to expect, as is claimed in the case of Formitol Tablets, anodyne, antiseptic, astringent, expectorant and solvent action, all at the same time (*Jour. A. M. A.*, June 19, 1920, p. 1730).

FORMULA FOR MOUTH WASH.—Castile soap, dried and granulated, 6.00 gm.; benzosulphinid, 0.20 gm.; basic fuchsin, 0.002 gm.; oil of cassia, 0.50 c.c.; oil of peppermint, 0.50 c.c.; oil of cloves, 1.00 c.c.; alcohol, 75 c.c.; water to make 100 c.c. A few drops added to water to be used as a mouth wash. It will be noted that, except for the volatile oils present, antiseptics are conspicuous by their absence. It is impossible to disinfect the mouth. Mere bacteriostatic (germ growth inhibitive influence of antiseptics can be of value only as long as the agent is present; and the time that one is willing to keep the mouth full of fluid is limited. The chief virtue of mouth wash preparations lies in their esthetic qualities, their pleasant appearance, odor and taste, which induces their use (*Jour. A. M. A.*, June 19, 1920, p. 1732).

“Horlick’s”

THE ORIGINAL

Is always clean, safe and reliable and protects your infant patients against the uncertainty and risks attending the summer milk supply, which bears such close relation to infant mortality at all times.

The Preferred
X-RAY

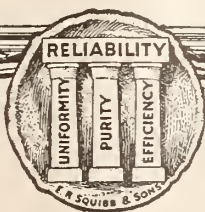
Meal with
Barium Sulphate

Write for
Literature

Avoid Imitations

Samples prepaid upon request

HORLICK’S MALTED MILK CO.
RACINE, WIS.



IMPORTANT

SQUIBB BIOLOGICALS

AT THIS TIME OF THE YEAR

For the Treatment of Pneumonia

especially of Type I, (Lobar Pneumonia)

Anti-Pneumococcic Serum is of great value. It should be used early in large quantities and full doses repeated every six hours until the crisis is passed; also **Anti-Streptococcic Serum** is important for pneumonia in addition to anti-pneumococcic serum. It is best not to use the two mixed, but to administer each separately as the symptoms and bacteriological findings demand.

Anti-Streptococcic Serum Squibb is useful also in post-partum or puerperal sepsis, in erysipelas, and for septic conditions due to wounds infected with streptococci.

For Increasing Phagocytosis in Sepsis

Leucocyte Extract is of paramount importance, either in conjunction with vaccine and serum, or alone if the exact pathogenic microorganism can not be determined.

For the Prevention and Cure of Diphtheria

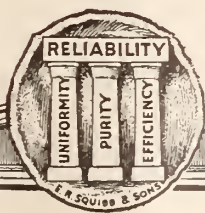
Diphtheria Antitoxin (Globulin) yields desired results. It is small in bulk for the number of units contained.

For the Prevention of Small-Pox

Small-Pox Vaccine is the trustworthy prophylactic.

Reprints giving detailed information will be furnished on request

E. R. SQUIBB & SONS, NEW YORK
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.
80 BEEKMAN STREET





The Rational Treatment *of* Constipation

AN eminent authority has said: "Cascara Sagrada ought never to be used as a purge, but only as a laxative." In a nutshell, that is the rationale of Cascara therapy.

Cascara Sagrada extracts should be given in gradually ascending doses daily, preferably at night. In obstinate cases two or even three daily doses may be required. The treatment should be persistently continued until the patient has a normal bowel action every day. Then and not until then should the dose be tapered off to the vanishing point.

Cascara Sagrada acts as a tonic to the intestine, thus preventing a recurrence of the torpid state that follows the use of purgatives generally.

Fluid Extract of Cascara Sagrada (P. D. & Co.) is the most active and efficient of all cascara products. It is made from carefully selected and cured bark, botanically identified as the true *Rhamnus Purshiana*. As a tonic laxative it has been prescribed with marked success for more than forty years.

Parke, Davis & Company

DETROIT

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 8

FORT WAYNE, IND., AUGUST 15, 1920

PER YEAR, \$2.00
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES

	PAGE
Twilight Sleep. A Report of Thirty Cases and a Summary of 5,575 Cases Reported in the Literature. A. R. Barnes, M.D., Indianapolis.....	259
The Physician: His Recreations and Vacations. Frank B. Wynn, M.D., Indianapolis.....	263
The Treatment of Syphilis as Practiced in the United States Public Health Service Clinics of Indiana. F. W. Cregor, M.D., Indianapolis.....	266
The Effect of Postoperative Rest on Coordination in Potential Tabetics. Scott R. Edwards, M.D., Indianapolis.....	271

EDITORIALS

Pulmonary Infections Following Operations on Nose and Throat.....	273
Compulsory Health Insurance.....	274

An Apparent Cure for Leprosy.....	274
Sanitation and Good Work.....	275
Editorial Notes.....	275

MISCELLANEOUS

Deaths.....	279
News Notes and Personals.....	279
The Truth About Medicines.....	292
Book Reviews.....	294

SOCIETY PROCEEDINGS

Revised Constitution and By-Laws of the Indiana State Medical Association.....	283
Indianapolis Medical Society.....	289
Montgomery County.....	292

NEXT ANNUAL SESSION, SOUTH BEND, SEPT. 22, 23, 24, 1920.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103, ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

NEW (3d) EDITION

Starling's Principles of Human Physiology

THE BRITISH MEDICAL JOURNAL says: "In the third edition the student and medical practitioner will find a full and up-to-date account of the whole subject, clearly written, excellently illustrated and summarized by a practical physiologist of great knowledge and well-known originality.

The first part of the volume deals with general physiology, or the structural, material and energetic bases of the body. In the second part the mechanisms of movement and sensation are described; a new feature of this edition is the introduction of chapters on vision by Dr. Hartridge, extending to over a hundred pages, in which the whole subject is very lucidly put before the reader. The third part describes the mechanisms of nutrition, includ-

ing metabolism and the physiology of digestion, the part played by the circulating blood and lymph, respiration, renal excretion and other such subjects. (*Publisher's Note.*—*Much new material has been inserted in the sections dealing with the internal secretions and ductless glands, the sense organs and the foregoing subjects.*) The last part of the book is devoted to the subject of reproduction.

Everywhere Professor Starling writes as a man of science interested primarily in the mechanics and chemistry of physiology, the concrete rather than the abstract, **the practical reactions of the living body* rather than the metaphysical conceptions or interpretations to which they may give rise."

By ERNEST H. STARLING, M.D., F.R.S., F.R.C.P., Jodrell Professor of Physiology in University College, London, England. Octavo, 1315 pages, with 579 illustrations, 10 in colors. Cloth, \$7.50 net.

PHILADELPHIA

LEA & FEBIGER

NEW YORK

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, South Bend, September 22, 23 and 24, 1920

OFFICERS AND COMMITTEES FOR 1920

President CHARLES H. McCULLY, Logansport
 1st Vice President BUDD VAN SWERINGEN, Fort Wayne
 2d Vice President SAMUEL HOLLIS, Hartford City, Ind. 3d Vice President CHARLES STOLTZ, South Bend
 Secretary-Treasurer CHAS. N. COMBS, Terre Haute

SECTION OFFICERS

Surgical Section—Chairman, James Y. Welborn, Evansville; Vice Chairman, M. R. Combs, Terre Haute; Secretary, H. O. Shafer, Rochester.

Medical Section—Chairman, Charles P. Emerson, Indianapolis; Vice Chairman, B. S. Hunt, Winchester; Secretary, Jane Ketcham, Indianapolis.

Eye, Ear, Nose and Throat Section—Chairman, John R. Newcomb, Indianapolis; Secretary, E. M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1920), Joseph Rilus Eastman, Indianapolis. Alternate, Miles F. Porter, Fort Wayne.
 For two years (term expires December 31, 1921), Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington.

COUNCILORS

CHAIRMAN, G. W. H. KEMPER, MUNCIE.			
DISTRICT	TERM EXPIRES	DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920	7th—S. E. Earp, Indianapolis.....	December 31, 1923
2d—J. B. Maple, Sullivan	December 31, 1921	8th—G. W. H. Kemper, Muncie.....	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922	9th—William R. Moffitt, Lafayette.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920	10th—E. M. Shanklin, Hammond.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921	11th—G. G. Eckbart, Marion.....	December 31, 1921
6th—T. S. Spilman, Connersville.....	December 31, 1922	12th—E. E. Morgan, Fort Wayne.....	December 31, 1922
		13th—H. M. Miller, South Bend.....	December 31, 1920

(See list of committees on page iv)

To the Medical Profession

Dear Doctor:

What do you do with your alcoholics and drug users?

The Hygeia Hospital service is maintained to take care of the habit cases that come to you for advice. Our method of treatment destroys the craving.

We deliver a fixed result—practically 100 per cent. There is but slight discomfort during the treatment. The toxemias resulting from the habit we correct.

If interested write for reprints.

WM. K. McLAUGHLIN, M. D., Supt.

Office State-Lake Bldg., Suite 702-4 - - - Chicago, Ill.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., AUGUST 15, 1920

NUMBER 8

ORIGINAL ARTICLES

TWILIGHT SLEEP *

A REPORT OF THIRTY CASES AND A SUMMARY
OF 5,575 CASES REPORTED IN THE
LITERATURE

A. R. BARNES, M.D.
INDIANAPOLIS

It is surprising that obstetrics has fallen so far behind surgery in devising and perfecting methods of alleviating pain. The use of so-called twilight sleep in labor, because of some unfortunate publicity and because of indiscriminate use in the hands of unqualified physicians, has suffered an eclipse. There are evidences that the method is gaining favor among careful physicians. This paper is an attempt to clear up some of the details of the use and misuse of the method and to arrive at a rational evaluation of its worth.

The literature here reviewed covers 5,575 cases reported by fourteen physicians. Many other reports were not included because they were lacking in details in which the writer is interested. The writer used and observed the method in twenty-five cases in Barnes Hospital, St. Louis, and in five cases at the Robert W. Long Hospital, Indianapolis.

In the following pages the method will be discussed under appropriate headings. Under each heading there will be a résumé of the literature related to that point, followed by a discussion of methods and results in the writer's personal series of cases.

Dosage.—The literature is agreed that, except in rare cases, the initial dose of $\frac{1}{6}$ to $\frac{1}{4}$ gr. of morphin should not be repeated. The

first dose of scopolamin or hyoscin averages about $\frac{1}{150}$ gr. Following this the dosage varies from $\frac{1}{450}$ to $\frac{1}{150}$ gr. of the drug, gauged according to the degree of narcosis. The reports decry adhering to a schedule in dosage, and insist on individualizing each case.

Personal series: Following the dosage schedule of Dr. Henry Schwarz,¹ the writer gave, as an initial dose, morphin $\frac{1}{6}$ gr. and hyoscin hydrobromid $\frac{1}{133}$ gr., the latter dosage being repeated twice at intervals of forty-five minutes. Following this, the cases were individualized and the frequency and size of the dose was determined by the degree of narcosis. In no case was the morphin repeated.

Time of Beginning Injections.—It is the consensus of opinion that the pains should be regular and strong before any injections are given. Many prefer to be guided by vaginal examinations, in which case, the injections are begun in the primipara when the cervix shows about two fingers dilatation. It is generally agreed that delivery ought not follow the injection of morphin closer than two and one-half to three hours, else the danger of asphyxia of the child is considerable.

Personal series: Strong, regular pains coming at intervals of five minutes in primipara and five to ten minutes in the multipara appear to be reliable criteria as to the time of beginning the injections. In part of the cases the first injection was governed by the dilatation of the cervix, as outlined above. The latter information can usually be obtained by rectal examination, if vaginal examination cannot be made under ideal conditions.

Environmental Régime.—Practically all writers insist on environmental precautions to exclude all external stimuli. This includes a quiet and darkened room, plugging of the ears, and the interdiction of all conversation above a

* Cum Laude Thesis presented before Indiana University School of Medicine Seminar, May, 1920.

whisper in the delivery room. The patient should be placed on the delivery bed before the induction of narcosis is begun. It is suggested by some that the patient ought to be allowed to sleep undisturbed following her delivery, and should not be questioned about her labor until several hours later.

Personal series: An attempt was made to comply with all these precautions in this series of cases. In addition light gauze packs were fastened with adhesive over the eyes of the patient to exclude all light.

Test to Determine Degree of Narcosis.—Gauss² and Beach³ advocate the memory test. In the hands of most obstetricians this test has proven useless or, at least, very unsatisfactory. Schwarz¹ advocates the finger-to-nose coordination test, and when that is lost he feels that the dosage has been pushed far enough. In his clinic it has proven the most useful test. Many prefer to rely on the individual's reaction to stimuli, such as the prick of the hypodermic needle, the degree of irrationality shown by the patient and the general behavior, the interpretation of which can only be made by one who has had considerable personal experience with the method.

Personal series: The coordination test was chiefly used. It is not an infallible guide, for in a few cases in which coordination was never lost satisfactory amnesia was obtained. One must often judge when the dosage has been pushed far enough as much by the general reaction of the patient to stimuli, and the degree of disorientation, as by tests.

Average Number of Injections.—In 1,179 cases in primiparous women the average number of injections was 6. The average number of injections for 1,256 cases in multiparas was 3.2.

Personal series: The average number of injections in twenty primiparous cases was 4.8; in ten multiparae it was 4.6.

Effect on the Duration of the First Stage of Labor.—Six writers consider the length of the first stage of labor uninfluenced, two claim that the first stage is diminished, and one holds that it is increased.

Personal series: The length of the first stage was unaffected.

Effect on the Duration of the Second Stage of Labor.—Most writers state that the second stage of labor is prolonged. A few dissent from this view, notable among which is Gauss.² Wil-

liamson⁴ reports the second stage prolonged four and one-half hours in primiparae and one and one-half hours in multiparae on the average. Berkeley and Ley⁵ report an average prolongation of fifty-five minutes in sixty-five primiparous cases. It is generally agreed that the delayed second stage is due to the patient's failure to use her abdominal muscles in expulsive efforts.

Personal series: The second stage was prolonged, the lengthening being slight in multiparae and from one to four hours in primiparae. Expulsive efforts are more necessary to overcome the resistance of the soft parts in the primipara than in the multiparae, hence the much greater delay in the former.

Patients Requiring Restraint.—Two hundred and five cases, or 3.5 per cent., were reported as restless enough to require restraint, five of which became hysterical and made it necessary to discontinue the injections. Aside from idiosyncrasy to hyoscin, Potts⁶ suggests that overdosage is the cause of excitement.

Personal series: Mild restraint was required in 6.6 per cent. of cases. None of these were maniacal.

Cases Showing Emesis.—In 145 cases in which this point was mentioned there were thirty-six cases of vomiting during the administration of twilight sleep.

Personal series: There was vomiting in three cases, in one of which there had been marked emesis before any injections were given. The nausea, however, was certainly much aggravated by the injections of hyoscin in this case.

Frequency of Forceps Delivery.—Forceps were applied 412 times, or in 16.8 per cent. of 2,442 cases in which this item was reported. Almost all of these were low forceps, and though this group is increased, yet it is agreed that high and mid forceps were much decreased.

Personal series: Low forceps were applied in 46 per cent. of the cases. A clinic case was made of an instance of uterine inertia and mid forceps were applied. Following the teaching of Dr. Henry Schwarz¹ low forceps were applied when the head was on the perineum and completely rotated if there was much delay. This accounts for the high percentage of low forceps in this series.

Condition of Child at Birth.—Respiration was spontaneous in 4,053 out of 5,205 cases, or 77.8 per cent. Light asphyxia was present in 813 out of 4,812 cases, or 16.9 per cent.; deep

asphyxia in forty-two out of 4,812 cases, or 0.87 per cent. Still births occurred in 244 out of 5,370 cases, or 4.4 per cent.

Personal series: There were five cases born in oligopnoea, or 20 per cent. of cases. In three out of five cases in which the oligopnoea occurred, the original injection of morphin was within two and one-half hours of birth. Administration of morphin less than three hours before birth will account for most cases born in oligopnoea.

Babies born in oligopnoea usually give one or two cries at birth and then turn blue. Then follows a period of apnoea during which time one can be clearing the throat of mucous, all the while keeping the baby warm. The infant's entire body should be anointed with warm olive oil and rubbed vigorously. The pulse goes down often as low as 70 or 80 beats per minute, and there is only an occasional inspiration. The babe may be transferred to a basin of warm water and immersed. The respirations usually increase in frequency now. Mouth to mouth inflation may be used at this stage to hasten the return of color. In fifteen to twenty minutes normal heart and lung action is obtained and the color is good. The keynote to treatment of these cases is gentle handling and maintenance of body warmth.

There was one stillbirth occurring in a case in which labor lasted thirty-six hours. No fetal heart sound was heard for twelve hours before delivery. The pelvis was generally contracted and there was an unusual degree of overriding of the parietal bones in the molding of the head.

Postpartum Hemorrhage.—Severe postpartum hemorrhage occurred in 220 out of 965 cases, or 2 per cent.

Personal series: One case had severe postpartum hemorrhage, but not sufficient to jeopardize the patient.

Effect on Baby's Weight.—Sixty-four out of 114 cases regained birth weight in two weeks. Whenever mentioned, writers express the opinion that twilight sleep does not adversely affect the baby's ability to gain weight. On this point more statistical evidence is badly needed.

Personal series: Five cases failed to regain birth weight in two weeks.

Effect on Lactation.—Four writers express the view that lactation is either favorably influenced or not affected, while the rest express no opinion.

Personal series: Lactation was below normal in two cases and failed entirely in one case. Here again comparison between a larger series of cases confined with and without twilight and under similar conditions need to be reported to determine whether lactation is unfavorably influenced.

Results Obtained as Regards Amnesia.—The following gives the results obtained by eleven workers in a total of 2,395 cases: Complete amnesia was obtained in 1,744 cases, or 72.8 per cent.; partial amnesia was obtained in 350 cases, or 14.9 per cent.; partial analgesia (no amnesia) in 155 cases, or 6.5 per cent.; failures resulted in 138 cases, or 5.7 per cent.

Personal series: Successful amnesia was obtained in 50 per cent. of cases. Partial amnesia and analgesia in 40 per cent. of cases, and failures resulted in 10 per cent. of cases. Most of the failures were attributable to starting the injections too late.

Average Total Length of Labor.—The average total length of labor in primiparae varies from eighteen and one-half hours in 179 cases reported by Winch,⁷ to twenty-seven hours in sixty-five cases reported by Berkeley and Ley.⁵ Potts⁶ reports twenty-three hours as the average duration of the labor in the primiparae of his series. Winch⁷ reports eight and three-fourths hours as the average length of labor in 256 multiparae under twilight sleep.

Personal series: The average total length of labor in twenty primiparae was nineteen and five-tenths hours. In ten multiparous cases the average duration of labor was eleven and three-tenths hours.

Effect on Mother.—All workers are agreed that the method is safe for the mother. Most all agree that mothers show a decrease of postpartum exhaustion and make quicker recoveries than mothers not confined under morphin and hyoscin.

Personal series: There was no maternal mortality. No untoward effect was noticed. In the successful cases there was a decrease in the postpartum exhaustion.

Résumé.—The successful administration of twilight sleep demands a capacity for attending to details, and the constant supervision of the obstetrician or one trained in the use of the method. It is important to insist on the environmental régime outlined above. The first crucial point consists in taking care in estimating the time of delivery, so that morphin will

not be given less than three hours before delivery. One should not adhere to a fixed dosage, but should individualize each case, gauging the size of the dose by coordination tests, and the general reaction of the patient as mentioned above. If, by the third injection, the patient still gives evidence of not being under the influence of the drugs, a few inhalations of chloroform will enable the morphin and hyoscin to gain the ascendancy over the pains after which the narcosis can be easily maintained.

The narcosis will be much more pleasant if the patient is given frequent sips of water. If the drugs are administered over a greater period than eight hours it is well to catheterize, as a full bladder may interfere with the descent of the presenting part. It must be insisted on that the labor be not discussed with the patient for at least twelve hours after delivery, and it is well if she can be placed in a quiet room following delivery in order that she may have undisturbed sleep.

If the pains subside the injection of 2 to 4 minims of pituitrin restores the frequency and vigor of the pains. Accurate knowledge of the progress of labor can be obtained by noting the descent of the parts with reference to the symphysis, the descent of the fetal heart sounds; and by rectal examinations, the condition of the cervix and the advance of the presenting part can usually be determined.

The additional use of chloroform in nontoxic cases at the moment of delivery will commend itself when tried, though it should be remembered that very much less chloroform is required when the woman is deeply narcotized. If delay occurs with the head on the perineum, pituitrin may be used if all the indications for its use are satisfied. So long as the fetal heart sounds remain good, three or even four hours may be given to the second stage. In this way the number of forceps cases may be greatly reduced. If the baby is oligopnoeic at birth the best results will be obtained by following a method similar to the one outlined above.

Twilight sleep is unsuitable in emergency conditions, such as placenta previa or eclampsia, in uterine inertia, and in any condition in mother or child which precludes the possibility of a natural birth. On the other hand, the method is ideal in borderline cases of pelvic contraction where we wish to give the woman the test of labor.

We must admit that amnesia is not obtained in 10 to 20 per cent. of cases, and yet at any

time the administration can be discontinued and no harm will have been done. The occurrence of mania can be treated in the same way. Personally, I have never seen a case of mania from the administration of morphin and hyoscin.

The method increases the number of low forceps operations 8 to 10 per cent. above the average of nontwilight cases. On the other hand, in many cases in which high or mid forceps are applied under the stress of the importunities of the relatives and the patient the labor could be terminated by a natural or at most a low forceps delivery if twilight sleep were used.

The increased use of pituitrin has been objected to, but if 2 to 4 minim doses are used (and there is no occasion to employ larger doses) there is no evidence that any harm is done thereby.

The frequency of oligopnoea is often urged against the method under the belief that the fetal mortality is increased over that in non-narcotized cases. Oligopnoea, more often than not, is the result of misuse of the method, and with the well recognized methods of resuscitation that we have it need not terrorize us. The question of fetal mortality is in need of further comparison in larger series of twilight and nontwilight cases to determine whether the infant's life is jeopardized by the use of morphin and hyoscin.

The most serious drawback is the arduous supervision required on the part of the physician. At present obstetrical fees he can ill afford to devote to a case the time that is required when morphin and hyoscin are administered.

The ability to skilfully use twilight sleep in labor will not suffice to procure for a physician an overnight reputation as an obstetrician. It has thus been often prostituted and brought into disrepute in the past. Neither will the method excuse defects in obstetric training or judgment. Indeed, success with the method will be largely in proportion to the physician's fundamental knowledge of the art and science of obstetrics. I believe, however, that the obstetrician who has mastered the method possesses an implement, which will prove of no small worth in enabling him, in many instances, to best serve the interests of his patients.

BIBLIOGRAPHY

1. Schwarz, Henry, *Painless Childbirth and the Safe Conduct of Labor*, Am. J. Obst. 79: 46, 1919.
2. Gauss, C. J.: Bericht über das erste Tausend Geburten in Skopolamin Dammerschlaf, München. med. Wchnschr. 54: 157, 1907.
3. Beach, R. M.: Twilight Sleep: Report of 1,000 Cases, Am. J. Obst. 71: 727, 1915.

4. Williamson, Herbert: Royal Society of Medicine—Special Committee of the Section of Obstetrics and Gynecology, Report on "Twilight Sleep," Longmans, Green and Company, London, 1918.
5. Berkeley and Ley: Royal Society of Medicine—Special Committee of the Section of Obstetrics and Gynecology, Report on "Twilight Sleep," Longmans, Green and Company, London, 1918.
6. Potts, W. A.: Scopolamine and Morphine in Labor, *Brit. M. J.* 2: 758, 1917.
7. Winch, G. H.: Twilight Sleep in General Practice, *Lancet*, 52: 563, 1919.
8. Blaine and Ramsey: Twilight Sleep: Its Present Status, *Illinois M. J.* (June) 1919.
9. Fairbairn, John: Royal Society of Medicine—Special Committee of the Section of Obstetrics and Gynecology, Report on "Twilight Sleep," Longmans, Green and Company, London, 1918.
10. Greenwood, W. O.: Result of Scopolamine-Morphine Treatment in Labor in 150 Consecutive Cases, *Brit. M. J.* 1: 355, 1917.
11. Polak, John O.: A Study of Scopolamine and Morphine Amnesia as Employed at Long Island College Hospital, *Am. J. Obst.* 71: 721, 1915.
12. Reed, C. B.: A Contribution to the Study of "Twilight Sleep," *Surg., Gynec. & Obst.* 22: 656, 1916.
13. Roberts and Stevens: Royal Society of Medicine—Special Committee of the Section of Obstetrics and Gynecology, Report on "Twilight Sleep," Longmans, Green and Company, London, 1918.
14. Rongy, A. J.: Collective Study of 2,000 Cases of Twilight Sleep, *Am. J. Surg.* 30: 52, 1916.

THE PHYSICIAN

HIS RECREATIONS AND VACATIONS *

FRANK B. WYNN, M.D.
INDIANAPOLIS

The physical and mental stresses which make up the warp and woof of the physician's life often bring him to where Nature calls loudly for respite. Yet how seldom he heeds the call. Eyes and ears he has alert for the health and comfort of others; but blind and deaf is he to his own greatest interest. With graduation he is too prone to put off the idealistic garments. He then garbs himself for his particular job, dropping into a rut with restricted vision and with but one thought uppermost—bread and butter and fame. He forgets at once the blossoms of life and their fragrance. The moths of avarice and selfishness deposit their ova on the green of life, where they hatch into devouring parasites. Or if, perchance, advanced age is attained, its fruit is apt to be eaten at heart by the dry rot of pessimism. Thrice fortunate are those whose medical careers represent a constant evolution toward better and richer things in every phase of existence; with the poetry of the beautiful to make glad, the marvels of the universe to entertain and instruct, and the philosophy of right living to give courage for daily tasks.

A very common fallacy in the public mind is that one should have an eye single to his

vocation. This is not good physiology. It is bad philosophy, leading to atrophy of soul. Let us grant that the main objective of life should be pursued persistently and intensively; not, however, to the exclusion of related subjects—tributary branches flowing into the main stream of life. From these small streams may come the purest water; on their banks may grow the greenest foliage and most beautiful flowers; in their beds may lie the most precious ores. Duty, not pleasure merely, commands us to explore them. For be it remembered that in the main stream of life is the swift current of modern stress, in which is floating new drift—mental and physical wreckage, arising from the storms of living conditions. The changes of modern civilization are producing new disease problems. The question is how shall we prevent the intensive exhaustion which is the inevitable sequel of intensive living? How is the human machine, running at high speed, to be maintained without engine trouble or wreck? In no vocation is this more true than in medicine.

The ceaseless grind of the general practitioner especially, wears a rut from which it is difficult to extricate himself. At least he thinks so. There is, for example, the ever-present obstetrical prospect and the insistence of old patrons, who selfishly assert first claim on his attention. Into his ears avarice whispers of a rival practitioner who will profit by his absence if he takes a vacation—perhaps establish himself in the good graces of favorite patrons. Thus, partly from habit, deluded by false conception of duty or subdued by fear, he stays in the rut until hardened vessels or nervous explosion clears his mental vision, and he sees, when it is too late, the error of his ways. How pathetic are these unwarranted sacrifices!

The public has sinned grievously against the physician's recreations and vacations. The wise and careful engineer rests and overhauls his railway engine at the end of every trip. The farmer who insists that the physician dance attendance to his family at all times turns his horses out to rest and green pasture on Sunday. He is more considerate of the soil he cultivates than the doctor he commands. After raising a crop of wheat he gives the fruitful field a vacation of a year or two before making it work again.

The physician is in part to blame for the selfish and domineering attitude of the public. Let him make plain to his clientele that he as well as engines, and fields and horses, must

* Fourth of a series of articles by Dr. Wynn which will appear regularly in *The Journal*.

have rest, recreation and change, in order to maintain himself at par, mentally and physically. Is he under no obligation to himself and family? Most of all is he culpable for cynically suspecting his colleagues of selfish design on his business. Let such a one look well into his own heart lest it atrophy with narrowness and selfishness. How infinitely better to have a frank and friendly understanding with one's colleague, that each should help the other in his absence. Such cooperative friendliness will not only protect one's business but insure peace of mind and foster professional team work to the mutual advantage of the profession and the public.

Vacations are quite necessary for the specialist. Justly the criticism is often leveled against him of a growing narrowness. Just as in a factory, piece-work makes a machine-like laborer, so the physician repeating over and over the same technical procedure, becomes like an automaton. Animation and enthusiasm wane. Dull routine dims his far-sight and clearness of judgment. Let him by rest and change restore the power of his nerve centers and the acuteness of his senses. The major surgical specialties are attended by a high degree of tension. The period of activity in major operative surgery is not very prolonged. When the fastigium of a surgeon's career is attained the intensity of action and responsibility is nerve-wracking. Notoriously common is it for him to become irritable and explosive. What assistant has escaped an outbreak of petulant fury or criticism from his chief? Such conditions are not conducive to steady hand or well poised judgment, so essential when engaged in major surgical attack. Men engaged in this line of work soon learn the imperative need of prolonged rest and open air recreation to restore courage, clearness and tone.

Recreation for the practitioner of medicine should be of two kinds: first, that which is taken at short intervals and in small amounts; and secondly, a more heroic dose, called a vacation. The character of recreation, too, will vary according to one's age, environment, tastes and physical vigor.

The city practitioner finds his minor recreations and diversions at the theater; in billiards and bowling at the club; in swimming, handball, boxing and fencing at the gymnasium. Commendable as all of these are they are not infrequently mixed with stale smoke and foul air. In season, of course, tennis for the younger and more athletic, and golf for the plethoric and

more mature, offer ideal recreative and hygienic features. They combine happily the elements of contest, skill and social intercourse, with delightful environment in the open. In these wholesome and manly sports, many busy men find the psychic and hygienic tonic which enables them to maintain a high-grade working efficiency.

Farming appeals to a few, but generally proves expensive, too often adding a new burden rather than relieving one of the old. Better for the physician, a garden in the rear of his house, where he may tease the soil into fruitfulness; or in the front yard shrubs and flowers with which he may play at odd hours, coaxing into bloom and fragrance.

More serious and difficult is the recreation problem for the practitioner in the smaller cities and towns. To him the ordinary facilities for recreation and diversion are not readily accessible. He is apt to be obsessed with the delusion that he cannot or dare not take recreation in deference to the prevailing public view that he must at all times be ready to answer every beck and call. It is refreshing now and then to see a practitioner of this group who has the spirit and independence to assert his rights. For a time he commands business to take care of itself, and with rod he matches his wits against the finny tribe or with gun roams the wilds in pursuit of game.

In the rural communities the public must be educated to grant the doctor his recreation and vacation, and the facilities must be provided. It is not an idle dream to expect in the near future the general development in town and rural communities of an athletic and social center for a large region. It should include an athletic field with tennis courts and golf course; ample club facilities and gymnasium. Let this become the social center, where manly sports may be indulged, concerts, lectures and entertainments provided; where systematic and continued effort is made to awaken community pride and interest in progress; and where the spirit of mutual helpfulness and democracy is cultivated. This is the most needed evolution of country life. The farmer has not as yet realized that this is one of *his* greatest needs. How else can he hope to satisfy the social and recreative desires so strong in his spirited sons and daughters? Let their natural and wholesome impulses have vent under the proper environment and direction, and they will not be so eager to quit the farm for the allurements of city life. It will rob farm labor of its monoto-

nous drudgery and gloom; give it a social, intellectual and vivifying touch which will make life in the country the most enjoyable and healthful of any occupation in the world. This, then, is one of the newer things which must come in the social and economic evolution of rural communities. In the consummation of these laudable projects the physician should be a prime mover and constant advocate. Whilst he may minister daily to the wants of individuals at the bedside, let him perform a public service by promoting this movement for social and recreative advancement. The idea is not a new one. Through the far-seeing vision and generosity of Mr. George Ade, a plan of this kind is already in operation at the village of Kentland, serving admirably the physiologic and recreative needs of a large rural population.

But a physician requires more than the tonic doses of frequent recreation. Occasionally his whole psychologic tract needs to be purged of the toxic irritation arising from a vexatious professional life. The best eliminating remedy is a vacation. To be out of range of the jangling telephone and the clatter of the streets; to escape nagging responsibilities, the monotony of complaining voices and the suspense of critical cases; to relax and sleep undisturbed, and roam at will in the great out-of-doors—this is to be born again.

The character of a doctor's vacation depends sometimes on his environment; more frequently it is determined by his taste. The man engaged in rural practice largely, craves a sojourn in the city, where he can get a new lease of enthusiasm by attending clinics and visiting hospitals. Recreational value he obtains, and he counts not small the newer knowledge which he acquires. On the other hand the man from the city desires to forget hospitals and shop talk.

Travel is the most favored plan of spending a vacation. Variety and change it offers in abundance, but is wanting in the quality of rest. Automobile touring, which is exceedingly popular at this time with physicians, is rather strenuous if one does his own driving. The tour should be interrupted by prolonged stops in suitable localities, to insure the relaxation which is an important desideratum. Besides the fascinating memory pictures of things seen in travel, there is cherished the recollection of chance acquaintances, thrilling adventures or humerous episodes—a complex which parries the train of thought away from its accustomed

channels. To the observing person it offers not merely entertainment and delight but a high order of instructional value. Among physicians it has always had many ardent votaries. The doctor is by training prepared to get the most out of travel. First of all he knows how to meet people, and get on with them. His keen senses will be quick to detect the unusual. His humor and optimistic attitude cultivated in the sick room prepares him to lead and direct in many of the unusual predicaments of travel. Hence he is very likely to be a favorite aboard ship or in a touring party.

Next to travel physicians prefer in choosing a form of vacation to follow primal instincts. Hence they find greatest delight in rod and gun. Analyzed, their chief joy lies not so much in the barbaric impulse to match cunning with the beast, fowl or fish, but in the benign and satisfying influence of the great out-doors; the charm of its infinite quiet; the curious and interesting denizens of the forest; the beauty and wonderment of it all. As the shadows of evening lengthen and you drag weary limbs along streams, over hills and through thickets into camp without having bagged anything worth boasting about; or, again, if the catch has not been such that you would care to send your friends a photograph—yet, what a day it has been! What an appetite you have and how you will sleep! One's ears are stopped to the clanging world. Instead there is the sweet lullaby of Nature calming the whole being and putting new life into jaded nerve centers.

Closely akin to the foregoing group are those who find sweetest surcease in rambling through the wilds. As I review in memory the most ardent nature lovers I have known, two physicians stand out conspicuously. By the bedside of one I sat the day before his death. Pulling me closer to him he said, in whispered voice: "The world is becoming too artificial. Men should learn the joy and beauty of the woods—the music in the rustle of dry leaves under your feet. We must get back closer to Nature." Then comes the memory of still another doctor. In imagination I see him again roaming the wooded hills of Brown County. It is he who plucks my sleeve to call attention to an unusual mushroom, or a rare flower tucked in at the root of some forest monarch. With fondness he names, almost caresses the trees. He commands quiet to listen to the note of a rare bird. We sit on a rail fence gazing over the distant hills, veiled in autumn haze whilst he, enraptured by the scene, thrills us with discourse on

science, art and literature. What finer recreation than this?

The list of open air recreations available for physicians should not omit mountain climbing—the *sport royal*. In comparison other out-door sports are but pastorals, mild and serene. Mountain climbing belongs to the realm of the heroic. Every rugged mountain is a challenge to the true sportsman. The burley old chap's defiant air leads you to resolve on his mastery. It looks simple—an hour or two to get up there. But the time is doubled, trebled and still you seem no nearer victory. How respect increases as you trudge the hours away! With each succeeding hummock of massive rock, you say surely this will be the last, and still they keep looming before you. What a few hours ago appeared to be a steep, slanting bed of shale, is found to consist of huge rocky débris over which you must climb with care. The ledge which it seemed you could lift yourself over is the height of a six-story building. Around narrow ledges you edge your way above a chasm thousands of feet below. No avenue of ascent is left except through a rift in the mountain cliff—what is known in mountain parlance as a chimney. In this crevasse are rocky débris, snow and ice. Up this steep and treacherous slope one must pick his way with extreme care, clinging to the rock, and gouging steps in the frozen snow. What a sigh of relief comes as the last steps of the chimney are negotiated! What curiosity possesses one to look over the top toward the range beyond! Here a new hazzard greets you—a cold, cutting wind. The clouds swirl about the rocks. Ten minutes ago there was sunshine. Now there is a blinding snow-storm. Peal after peal of thunder reverberates from the neighboring ranges! The air is surcharged with electricity. It hums and sizzles in your hair. The old mountain is in terrifying wrath and has brought all the furies to combat you! Now is the time to keep your head. Bide the stormy period with patience and serenity. Mountain storms are transient. Almost in the twinkling of an eye, the clouds lift, float away and settle like a billowy sea in the valleys below. Here and there a jagged peak pierces the fleecy whiteness like an island in mid-ocean. Ah! What thrills and visions are these! How paltry in comparison are the other recreations of the out-doors! Let me commend it to physicians, not only as heroic sport, but as typifying life itself—its obstacles, its thrills, its dangers, and for those who are steadfast—its joys and rewards.

(To be continued)

THE TREATMENT OF SYPHILIS AS PRACTICED IN THE UNITED STATES PUBLIC HEALTH SERVICE CLINICS OF INDIANA*

F. W. CREGOR, M.D.

Medical Director
INDIANAPOLIS

A discussion of venereal diseases, from most any angle, offers such a splendid opportunity to digress just a little to the subject of state social medicine, that it requires no small effort to confine one's self to the subject of the paper. With your kind indulgence, I wish to review briefly a few things of a general character, before passing on to the special subject, representing one phase only, but a very important one, that of the treatment of syphilis.

Examination of the conscripted men for the purpose of mobilizing the soldiery of the country, revealed to the government the then normal condition as regards the prevalence of venereal diseases. To say that the government was appalled, would be putting it mildly. True, physicians were familiar with existing conditions, and especially those whose work brought them in close contact with the sequelae of these diseases. The situation was frequently discussed between and among members of the profession, but the press seemed intolerant, the public indifferent. Consequently, the medical man was content to render his services to his patients and wait for some upheaval to awaken the public conscience to the truth. This came with the world war.

Those having to do with the affairs of the government met the issue face to face and absolutely on the square, with the same true spirit of Americanism that characterized the attacking of every other problem of the great war. Appropriations were made by Congress to meet the emergency. The public health organizations, both federal and state, were more closely coordinated and placed on a war basis, and the work was begun! Later, Congress renewed these appropriations which were to be made available when the different states had manifested their interest by their legislatures making a like appropriation. Ordinances were drawn for the adoption by municipalities, designed to keep intact the main purpose, and yet sufficiently elastic to meet different conditions that prevailed in different communities. Councils,

* Presented before the Union District Medical Society at Connersville, April 22, 1920.

both municipal and county, chambers of commerce, social clubs, fraternal and manufacturing organizations, etc., have assisted by contributions. The attitude of the state organizations toward the different municipal units of the state has been the same as that of the federal organization toward the state organizations, namely, that the problem was a local as well as a general one, and as the federal government required that the several states should manifest their interest by making an appropriation equal to the amount that the state received from the government, so, in turn, the state has asked that the different municipal units manifest their interest in their local problem by a proper cooperation.

There may be said to be two main purposes in this work: (1) The control of these diseases in the already infected persons, for at the time of the mobilizing of the army the emergency was at its greatest height; (2) the education of the public to the truth concerning venereal diseases, that the public might enjoy the protection that will naturally come from this knowledge. Discussing one phase of this subject, that of syphilis, Metschnikoff (who has done so much for humanity) wrote: "To lengthen human life, it is a fundamental necessity to avoid infection by syphilis. To reach this result, everything must be done to spread medical knowledge about this disease. Complete information is the only means of protecting humanity against this scourge." All are familiar with the campaign of education that has been placed in motion, and it need not be more than mentioned here. Full cooperation has been had from the press, from social, church, fraternal and civic organizations, as well as the courts, and the public has received this information eagerly, until the time has come when the medical profession must meet its full responsibility if it would not have the public move on without it. The great reason for the first purpose ended with the signing of the armistice, for the stress of war was by that act relieved; but the government would have been very derelict in its duty had it discontinued its activities with the signing of the armistice, possessed, as it was, with the knowledge of the wide prevalence of venereal diseases. I have no hesitancy in saying, that if nothing more than this should come from the war, that it would have been well worth while.

The health authorities have sought at all times to do their work through the medical profession; just how well the medical profession has cooperated I would hesitate to say. I do know that

no small effort has been required to prevent well meaning though misguided enthusiasts from rendering a sane and practically conducted educational campaign from becoming a public nuisance.

The decision of those who have been charged with the movement for the prevention and control of venereal diseases may be said to be this: disease is disease, and a method found best in controlling one disease may very well be applied to the control of another; consequently, these diseases should be treated just as any other infectious communicable disease, namely, report, quarantine, and a general supervision commensurate with the nature of the disease.

I wish to digress just a moment to read a paragraph from a paper offered by this writer on the subject of syphilis seven years ago, or during the year of 1913. Quoting from this paper: "I first wish to say that this plan is wholly original and I do not wish to burden any one else with the criticisms that arise from advocating it. If the law that would become effective three years from this time (thereby giving every person a show, or an opportunity to evade its provisions) should provide that every case of syphilis should be reported to the State Board of Health, and that that report should remain a secret report for a period of three years, at which time, if the patient filed a certificate from a licensed practicing physician, under oath, that he had taken full treatment for his syphilis, the report would be destroyed and ever remain a secret; in case such a report was not filed in a stipulated time, the report would then automatically become a public record." At that time, I may say, that I had in mind that some such plan would be in operation in perhaps 100 years, but due to the war we find it (for all practical purposes) in operation within a period of seven years.

The first portion of this paper recites something of the history of this movement in Indiana, which has not been different in the several states, except as to detail; the last paragraph may be said to reflect the attitude of the writer toward syphilis at the time he opened the first U. S. Public Health Service Clinic at Indianapolis, in the dermatological rooms of Indiana University School of Medicine, the university cooperating, on Oct. 16, 1918, with the result that in Indiana today there are twenty clinics equipped with complete laboratory facilities. In this work Indiana stands second in the nation,

notwithstanding the fact that many states have more than double the population of this state, and today the press, the social, labor, manufacturing, fraternal, and many kindred organizations are in full cooperation in the educational campaign that represents the very foundation on which the success of this movement must rest. Certainly the great modern thought for preventive medicine can receive no greater impetus than comes from such work.

Briefly, let me call attention to what has at all times been the policy of the clinics toward society, the patient, and the medical profession. When diagnoses were once made it was explained to the patients that society, through the government, both federal and state, was demanding of them that they conform to the accepted rules for the treatment of their disease, and that they would be under supervision until they had done these things; also that the only way for them to escape embarrassment was to follow the instructions until they were discharged. The patients have at all times been surrounded by secrecy, and a personal attention no different from that they would receive in a well regulated private office. Where the history disclosed that they had been receiving treatment from a private physician, they were advised to return to the physician and urged to continue until they had been discharged; and where it developed that patients were able to pay for the services of a physician they have been advised to select their physician and adhere to his advice. The attitude of the clinics toward the physicians of the state has been that of helpfulness. Designed to meet a demand in classes of patients who could not or would not properly conduct themselves toward their infection, they have largely relieved the physicians of the care of those unable to pay for their services, and from a class in addition that was generally undesirable. The spirit of cooperation has been uppermost in the minds of those in charge, and any record has been at the confidential service of any physician for his assistance, if he cared to avail himself of it. The clinics have never refused service to any one who applied for it, and in addition have never charged any one for any service rendered. This, you will say, is unfair to the physician, and I will admit it; but then take into consideration the need of the work, and, too, that we are standing in a position to force patients to take treatment, and do so. We have never yet found that we could accept any fee from

any patient. However, this particular phase has never ceased to be a source of worry to those who are directing this work, and I feel it due the profession to say that a way will be soon found that will meet with the approval of all.

Pamphlets have been sent to the physicians of the state, embodying the generally accepted, more modern views for the treatment of these diseases. This was not done under the assumption that physicians were not competent to properly treat these diseases, but for the purpose of more thoroughly standardizing the treatment and unifying the work. The men directly engaged in this work have had special training for the most part, some in the army medical corps, and all have had their medical training during the more recent years since the newer diagnostic methods and treatments have been in practice. Personally, I have not come in contact with any members of the profession who were not in complete harmony with this work. That there are such members can not be denied, from reports that have come to me from different sections of the state; but it is hard to conceive of a medical man not being in full sympathy, who has taken the time to acquaint himself with the facts, and unthinkable as coming from one who has been seriously impressed with the high ideals of his profession! It is plain that the success of this work must rest on the results obtained. If the movement were a complete success, the clinics must eventually, automatically go out of business for want of patients! While such a Utopian condition may hardly be expected to be in sight, nevertheless very decided improvement is already to be observed, and will very soon be in a very satisfactory condition if the medical profession will lend the same cooperation that civil organizations are now doing. The reformer does not, to my mind, occupy an enviable position. The attitude of the physician is not and should not be that of a policeman or a reformer, in the sense that we are wont to use it; but the profession must arise to the demands of the hour, must awaken to its obligations to society, and to a full realization of the rightful demands on it! Then, and then only, will the physician fulfil his obligations to his fellowmen, render a full measure of responsibility to his patients, and measure up to the definition of Hippocrates, which was that "a physician is a good man skilled in the art of healing." When the profession does these things, venereal disease control will be easy of solution.

The treatment of syphilis, as practiced in the U. S. Public Health Service Clinics, does not differ in any essential from that practiced in my own private office. No originality is claimed for the plan, it being based largely on the teachings of the Vienna school.

The treatment may be divided into prophylaxis, abortive, and curative. Metschnikoff's experiments on monkeys and men have shown that prophylaxis may be practiced with a reasonable degree of assurance of success. The plan is to immediately, under twelve hours if possible, and always within twenty-four hours from the time of exposure, apply a thorough soap and water bath, which is to be followed by a massage into the exposed tissues of 33.33 per cent. ointment of calomel in lanolin. In many instances where the exposure was thought to be on the genitals the chancre has appeared on the lip. It is obvious that while this treatment can be applied to the male to advantage, it cannot be said to be true with the female, so that as physicians we are forced to admit that if exposure comes infection may follow, regardless of the prophylaxis practiced, and advise that if exposure has taken place these measures be employed, that we may feel and know that we have done all that was possible in the given case. A prophylactic station is established at the time the clinics are opened, but the applications for treatment from the civil population are rare.

Abortive: In the presence of a suspicious sore, absolutely no treatment is instituted until after the diagnosis has been determined. Not infrequently it is necessary to withhold the microscopic examination of the secretions until the effect of already applied remedies has disappeared. If nothing has been applied that would affect the character of the sore, the secretions are at once examined under the microscope with the aid of the dark field or the India ink method, unless it is observed that this sore is of longer duration than four weeks, when the Wassermann examination may very well be substituted for, or made in conjunction with, the microscopic examination. If the sore is of less than two weeks' duration, and the microscopic examination is positive, the opportunity to abort the disease is excellent, indeed. The sore is excised under a local anesthetic, the wound painted with tincture of iodine, and a dressing of iodoform or aristol, or ammoniated mercury applied. An intravenous injection of neoarsphenamin is administered, which is re-

peated at five-day intervals until four to six doses have been given, following which a course of intramuscular injections of mercury are administered. Before beginning treatment the blood is taken for a Wassermann, which should at this time be negative; it is repeatedly taken following the completion of the abortive treatment to determine the success of the same.

Curative: The choice of treatment for the cure of syphilis is determined by the stage in which the disease is found. These stages are divided into two—early, being within one year from the time of contracting the disease, and latent, being any time after the lapse of the first year. Regardless of the stage in which the disease is found, after the lapse of nine weeks from the time of the exposure (at which time the disease has become fully generalized and deposited in the tissues of the body), patients are required to take the full treatment for the cure of their disease. Every effort is made to determine just how much intelligent treatment the patient has received, and he is given due credit for such treatment.

Early cases begin their treatment by receiving four doses of neo-arsphenamin intravenously. In every instance before the administration of neo-arsphenamin, a urinalysis is made. This urinalysis is made to determine the elimination of the patient. He is also admonished to see that the bowels move freely within twelve hours. This is of the utmost importance for the reason that it has been shown that the drug may undergo chemical change into an arsenic oxide of high toxicity. These four doses of arsphenamin are followed after a period of one week by an intramuscular injection course of salicylate of mercury in sterile paraffin oil, made at weekly intervals into the gluteal muscle of the hip on alternate sides until the quota of mercury for that particular patient has been given. And what is the quota of mercury for a given patient? This is determined by the weight of the patient, regulated as follows: A patient weighing between 110 and 130 pounds receives 7.5 grains of salicylate of mercury to constitute a course; from 130 to 150 pounds, 9 grains; from 150 to 170 pounds, 10.5 grains; from 170 to 190 pounds, 12 grains, and from 190 to 220 pounds, 13.5 grains for the course. Patients receive seven courses of mercury to constitute a full cure. These courses are divided over a period of three years, as follows: During the first year, three courses; second year, two courses;

third year, two courses. Each of these courses is followed by the administration of sodium iodid in doses of 10 grains after meals for a period of eight days; these iodids are followed by a single dose of neo-arsphenamin, and this by a rest period. The length of time of the rest period is determined by the time that has been consumed in giving the course of treatment; thus, for example, if a patient consumed ten weeks in taking a course of treatment during the first year, he would receive a rest period of seven weeks; whereas, if he consumed ten weeks in taking a course of treatment during the second year, he would receive a rest period of sixteen weeks, for the reason that he receives three courses of treatment during the first year, the year being divided into three cycles. As he receives two courses during the second and third years, these years are divided into two cycles. Those patients offering themselves after it is too late to abort the disease, or after five weeks from the time of exposure, and before the disease has become fully generalized, as would be evidenced by the generalized skin manifestations, and yet the Wasserman positive, with possibly the prodromals, such as malaise, elevation of temperature, and adenitis, may terminate their treatment at the expiration of the first year, provided the Wassermann has become negative, no symptoms develop, and they offer themselves for Wassermann examinations for the period of another year. The only difference in the treatment between the early and latent cases is in the beginning of the treatment, and it is the rule to proceed with the administration of mixed treatment for a period of two to six weeks in the latent cases before beginning the administration of neo-arsphenamin, excepting in rare cases of latent syphilis where the arsphenamin seems to act well without being preceded by the iodids.

Some one has said that there are thirty-five different things to be considered in making a single successful golf stroke! I have no hesitation in saying that there are thirty-five separate points to consider in making a successful intramuscular injection of mercury. I will mention four of them: (1) Selection of the syringe; (2) the selection of the needle as to size and length; (3) the thrusting of the needle through the skin, and (4) the disconnection of the needle from the syringe before the piston is pushed down. Every care must be exercised to successfully make these injections. The full dose of a 10 per cent. suspension of salicylate of

mercury in paraffin oil is 1 c.c., representing a grain and a half of the salt, but the beginning dose should be much smaller until the tolerance of the patient has been determined. It is our habit to begin with 5 minims, which would represent 0.5 grain of the salt, gradually increasing the dose to the point of tolerance, or to 1 c.c. The neo-arsphenamin is administered by dissolving the dose in 10 c.c. of freshly distilled water at room temperature, under aseptic conditions, and injected into the vein.

Neo-arsphenamin is administered to infants by dissolving the dose in the smallest amount of water possible, under the same conditions as mentioned above, and the dose injected into the gluteal muscles by dividing the injection between the two hips.

In case of children, who would be, and a few adults, who are, terrified by the intramuscular injections of mercury, resort is made to the inunction method. We feel that in the case of children, whose parents are responsible for their unfortunate condition, and those who are under the supervision of nursing service in institutions, that in the first case parental affection, and in the second case professional duty, are sufficient guarantee for the proper administration of the mercury by this method. But detailed instructions are required if the treatment is to be made efficacious. In these cases the inunctions are given daily, on five different portions of the body, resting on the sixth day; these cycles being kept up over a period of thirty-six days, each course followed by iodids, neo-arsphenamin and rest, with the same number of courses over the same length of time to constitute a full cure.

In a general way, we purpose to keep mercury in as constant contact as is feasible with any clinical manifestation of the disease. In those cases with alopecia specifica, a 10 per cent. ammoniated mercury ointment is massaged into the scalp daily; in cases with leukoderma specifica a similar prescription is given to be massaged into the skin of the neck daily. Mucous patches of the mouth are treated locally by touching daily with a 0.5 per cent. bichlorid of mercury in alcohol; cases presenting papules, or squamous lesions of the palms or soles, receive 1 per cent. of bichlorid of mercury in flexible collodion, applied once daily; cutaneous manifestations, such as rupia, pustules, papules, etc., are treated locally by plaster mulls or ointments containing mercury.

All patients are admonished to keep their mouths in a hygienic condition, and advised to consult a dentist, to keep the teeth in a good state of repair. The relationship between syphilis and irritation is carefully explained to patients that they may guard against the excessive use of tobacco, etc.; they are advised that if they take the treatment and do these things, they will never again have any symptoms of their disease.

SPINAL WASSERMANN

As is to be expected from the past attitude of society and of the medical profession, we have with us the neurosyphilitic. He is roaming the highways of every section of the country, a potential candidate for the insane institutions. He is often found lying in county jails awaiting the death of another in one of these institutions, ere he can take his place; and in many instances through no fault of his own. Unfortunately, the insane institutions do not have an opportunity to reach these cases before it has usually become too late. Thanks to the cooperation of the Indianapolis City Hospital, through the Indianapolis City Board of Health, the mayor and the city council, we have been enabled to treat a number of the neurosyphilitics. It has been the rule to pursue an intensive course of systemic antisyphilitic treatment before beginning intraspinal treatment. Some cases have received their treatment intravenously, followed immediately by draining off the spinal fluid; others, by the method consisting of administering neo-arsphenamin intravenously, and immediately dawning off a quantity of blood, the serum from which, amounting to about 30 c.c., is introduced into the spinal canal next day to take the place of that amount of spinal fluid removed at the time. Much the larger number of cases have been treated by a method consisting of collecting about 30 c.c. of spinal fluid, adding a dose of neo-arsphenamin ranging from 0.5 to 7 mg., to the fluid and allowing it to pass back into the spinal canal by gravity. About 300 treatments have been given, all of which have been checked, clinically and serologically. When clinical improvement would seem to justify, these cases have been taken off the intraspinal therapy and returned to the systemic treatment of their disease. The results of our work have

demonstrated to our entire satisfaction the efficacy of intraspinal treatment in a class of well selected cases.

CONCLUSIONS

1. The medical profession should take an uncompromising stand for the full and complete treatment of syphilis.

2. This can best be done by full cooperation with the lawfully constituted health organizations of the country.

3. Syphilis may be aborted if encountered before five weeks have elapsed from the contraction of the disease.

4. Syphilis may be cured by one year of treatment, providing it is encountered before it has found lodgment in the tissues of the host.

5. Syphilitics may be assured that they will remain free of symptoms, providing they fully cooperate in the treatment.

6. The Wassermann should be employed as an aid and a comfort, and not as a guide and a control for action.

7. As full cooperation is impossible in the face of ignorance of the disease and its potentialities, it is necessary that the patient be apprised fully and honestly of these things.

8. Steps should be taken to reclaim the neurosyphilitic, possibly through the insane institutions, until such time as public enlightenment will relieve the present demand.

9. A spinal Wassermann should be made in all cases before the case is discharged.

725 Hume-Mansur Building.

THE EFFECT OF POSTOPERATIVE REST ON COORDINATION IN POTENTIAL TABETICS

SCOTT R. EDWARDS, M.D.
INDIANAPOLIS

That *tabes dorsalis* is due to syphilis is accepted but the pathologic anatomy and pathogenesis is still questionable. However, there is one definite point of agreement in the different theories based on the progressive degeneration of nerve tissue. If the nerve tissue involved is placed in functional rest at a certain period in this degeneration there is apparently a very marked loss of compensation.

Routine Wassermann reactions have given us some interesting facts in the relation of syphilis

to surgery, the most striking of which is the effect of three to four weeks postoperative rest on cases of spinal syphilis, that is, cases which had not shown any definite clinical loss of voluntary motor control. No doubt inactivity due to any particular cause would give a parallel result but our attention was drawn to the problem when two patients within the same month, left their bed, both markedly incoordinated and continued so for several weeks with slow improvement. These cases were treated by intensive antisypilitic measures but the gradual improvement was by far more noticeable than was to be expected when compared with *tabes dorsalis* as it is ordinarily encountered when under treatment.

In casting about for an explanation as to cause and effect in these cases, the progressive pathology to be found in the kidney seems to us an analogous process.

With two normal kidneys the human organism has a maximum secreting tissue far in excess of actual necessity. As the chronically infected kidney gradually replaces its secreting structures with nonfunctional fibrous tissue, the process becomes far advanced before any gross clinical manifestation is apparent. As the point of minimum functional kidney structure compatible with elimination necessary to maintain the equilibrium, is approached, clinical signs become apparent. Unless a sudden abnormal stress is added to the load the early breaks in function are fleeting. If at this point in the process the destruction of further renal tissue can be controlled by the elimination of the source of infection, the equilibrium between work done and work required of the kidney can be maintained. Compensatory effort of the remaining functioning tissue upholds the burden.

So it is with the structure of the posterior funiculi and its peripheral ramifications. We have reason to believe from biologic analogy that any tissue so highly specialized as the tissue of the nervous system must certainly be in excess of actual necessity, as in the kidney, greater in amount than is actually required to maintain the required function. As the point of absolute equilibrium is approached, the degeneration of each successive cell causes a compensatory effort on the remaining functional cells. Before the time when gross clinical symptoms are apparent the functional activity demanded of this particular tissue is being carried on by a minimum number of cells all doing compensatory work.

Compensatory effort will only be continued as long as demanded. Again, as in the kidney, if the degenerative influence of the noxa could be eliminated the remaining cells could probably retain their functional equilibrium. It is at this point in the course of *tabes* that the effect of the rest of postoperative convalescence has a very striking effect. From a high tension activity these cells are suddenly let down to the other extreme—that of minimum activity. And after a period of from three to four weeks this rôle of little to do seems to be very much to their liking.

These patients go to bed apparently well coordinated, to get up at the end of convalescence markedly incoordinated. This lack of muscular control is not to be confused with the condition commonly seen after such a period of inaction of a nontabetic. The gait is distinctly ataxic, Romberg's sign markedly present, deep reflexes sluggish or absent. But contrary to the course of *tabes*, in a period of from four to ten months there is a very distinct improvement. This improvement in coordination is out of proportion to that to be expected from treatment.

One case will illustrate, it being the most extreme, both in regard to incoordination, and period of time over which improvement was noticed.

Female, aged 54, white, married, no children. Family history good. Husband well. Personal history has no bearing other than syphilitic infection twenty years previous and fixed pupil for several years. Antiluetic treatment of mercury, iodids and arsphenamin had been taken at intervals over entire period.

She presented herself with inguinal hernia for which she desired to be operated. At this time her reflexes were very sluggish but the gait and station were both good.

After operation and three weeks' convalescence with rest in bed this patient was unable to stand unsupported for a period of weeks and had a very marked ataxic gait. At this time after almost a year her station and gait is fully as good as before her operation.

What the true explanation of this observation may be is only theory. But it seems reasonable to conceive that the marked loss of symptoms is due to the gradual reestablishment of compensatory work by the remaining functional tissue; each cell doing maximum work until, as they one by one succumb to the progressive degeneration, true physiologic loss of functional equilibrium will be reached.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

AUGUST 15, 1920

EDITORIALS

PULMONARY INFECTION FOLLOWING OPERATIONS ON THROAT AND MOUTH

With the steady progress toward perfection in surgical technic that has characterized the past decade or two there has arisen *pari passu* a certain indifference toward potential factors for surgical calamities. This is probably due to the fact that in comparison with the great number of operations that are being performed today these postoperative untoward results are so relatively infrequent as not to have seemed to merit very grave consideration. Just here lies the difference between the operator and the surgeon, recently suggested by W. J. Mayo¹; the one interested chiefly in the perfection and precision of his operation, the other having his primary concern with the welfare of his patient not only during but after operation. And not only the surgeon, but even more should the internist and family physician concern themselves with the possible after-effects of an operation on their patient, for it is to their lot that falls the responsibility of guiding the future course of the patient and it has usually been through their advice that the aid of surgery has been invoked.

A striking illustration of tragic sequelae which may follow seemingly minor operations is afforded by the more recent reports of post-tonsillectomy, pulmonary abscess, a condition which only comparatively recently appears to have been seriously noted. The report of a case by Bossim in 1913 was followed by Scudder and later by Manges' report, in 1916, of nine cases. More recently Clendenning² has contributed a very interesting article on the subject, wherein motor-driven anesthesia is blamed for a goodly proportion of the cases.

And while it is admittedly true that the condition has followed ordinary general anesthesia and even occasionally tonsillectomy under local anesthesia, yet the theory of increased danger

from the constant blowing over an infected field of operation, of a rather strong current of bacteria-laden air does not seem altogether far-fetched. Add to this constant current, the further advantage for accumulation of infective débris afforded by the dorsal position insisted on by many throat specialists in preference to the lateral wherein constant drainage may be maintained, and there is presented an ideal combination for inhalation risks.

Another factor more recently considered by Cutler and Hunt³ is that of embolism from the operative field, and since the lymphatic as well as the vascular relation of the tonsils and the lungs is very close, it is possible that this may be a not-infrequent mode of transfer of infection to the lung. In fact, these latter observers believe that embolism from the operative field is the chief factor in the etiology of such postoperative pulmonary complications as pneumonia, bronchitis, pleurisy, empyema, lung abscess or fatal pulmonary embolism, although they are inclined to agree with Whipple that inhalation anesthesia on top of an existing lung lesion may in some cases be the dominant factor. That such postoperative pulmonary complications are by no means rare is proven by reliable statistics which show that one patient in from every thirty to fifty operated on, no matter what the anesthetic, develops a pulmonary complication, and one patient in every 150 to 175 patients dies from some such complication. In discussing the subject of pulmonary complications resulting from a foreign body in the bronchus, Hedblom⁴ summarizes by declaring that aspiration of the lungs is most common in operations about the mouth following general anesthesia; that symptoms may be immediate and continuous, there may be an intervening symptomless period of months or years, or there may be no immediate symptoms. Some salient points relative to the subject of lung abscess following tonsillectomy are noted by Burger,⁵ who reviews the literature since Manges' report in 1916. While he thinks that the possibility of blood-borne infections cannot be excluded, yet the lack of preparation for the operation may also be a factor. He also states that recovery after long convalescence is usual, but operative intervention has sometimes been necessary, such as opening and draining the abscess or resection of the lung. He concludes that the data cited confirm the advisability of remaining in bed under medical supervision for a few days after tonsillectomy; also the necessity for the

3. Arch. Surg., pp. 115-157 (July) 1920.

4. Ann. Surg., pp. 568-581 (May) 1920.

5. Nederlandsch. Tijdschr. v. Geneesk., Amsterdam, p. 1359 (Nov. 1) 1919.

1. J. A. M. A., pp. 1685-1689 (June 19) 1920.

2. J. A. M. A., pp. 941-942 (April 3) 1920.

employment of local anesthesia for older children and adults, and in young children the special precautions which every general anesthetic should impose.

From the above cited observations, it would seem logical to conclude that more attention should be given to the surgical preparation of any prospective mouth or throat patient; that general anesthesia should be reserved for children and for those cases wherein other surgical measures were to be undertaken which demanded general anesthesia; that whenever possible in mouth operations, light gauze packs should be utilized to guard against aspiration of foreign material into the bronchi; that the lateral posture should be the one of election, and lastly that skilful operators minimize the risk of dislodging septic emboli by virtue of minimum trauma and maximum expedition.

COMPULSORY HEALTH INSURANCE

The Council on Health and Public Instruction of the American Medical Association has issued a pamphlet entitled "Health Insurance and Physicians," written by the secretary of the Council, which we think ought to be read by every physician in the country in view of the present agitation concerning the subject. Much has been said for and against Compulsory Health Insurance, but in the main, the physicians of the United States are opposed to it, largely through reasons that have to do with their own economic welfare though they should oppose it for other reasons equally valid. Very naturally, we are inclined to protect ourselves first and the other fellow afterward, and this leads to the assumption that our attitude is a selfish one rather than one inclined to be considerate of the interests of others as well as our own. In the discussion of Compulsory Health Insurance we must take into consideration not only the injustice that the scheme will have on the economic welfare of the medical profession, but the injustice and unfairness with which the plan will operate for the working man. Granted that there are many reasons why some plan should be adopted whereby employed persons may be better safeguarded against financial loss and incapacity due to ill health, the question arises as to whether Compulsory Health Insurance is the best remedy. Already the American Medical Association, at the New Orleans session of this year, adopted by practically unanimous vote a resolution declaring its opposition to any plan of compulsory contributory insurance against health or any

other plan of public health insurance provided, controlled or regulated by any state or the federal government. A number of the state medical associations have adopted similar resolutions.

The pamphlet to which we already have referred calls attention to five alternatives besides compulsory state insurance which may be considered as a remedy. These are: 1. An increase in the wages paid to employed persons so that each one will be in a financial position to bear his own burdens without need of assistance from the state. This is the economic remedy. 2. The development of state, municipal and local health agencies to a point where preventable disease will be reduced to a minimum and the burden lightened by reducing the amount of sickness. This is the public health remedy. 3. The development of voluntary thrift and savings habits among employees to a point where through increased thrift and foresight they may be able to provide for their own emergencies. This is the personal remedy. 4. The development of voluntary industrial insurance on the part of employees and employers in industrial corporations and groups. This is the cooperative industrial remedy. 5. The development on the part of wage-earners and employees themselves of voluntary assessments and benefits through trade unions, benefit associations, etc., for their own protection. This is the cooperative social remedy.

Of these the first, logically, is the one that is deserving of most consideration and it is the one that we have advocated in our editorial comments on the subject in earlier numbers of *THE JOURNAL*. There is absolutely no reason why employed persons should become dependent in any sense, and some means should be adopted to make them economically independent. There is no reason why a large proportion of our people should be pauperized, the expense to be divided between the state and the medical profession. These socialistic tendencies may be all right in theory, but in practice they are not going to work out satisfactorily.

AN APPARENT CURE FOR LEPROSY

Announcement has been made by Surgeon-General Hugh S. Cumming of the United States Public Health Service that reports have been received from the leper colony in the Hawaiian Islands concerning an apparent cure for leprosy, a disease which, since early history, has been regarded as a hopeless and incurable scourge of humanity. For several years the

belief has been gaining ground that leprosy could be cured, and encouraging progress was made by several investigators. The starting point for this study was the observation that now and then the course of the disease appeared to be favorably influenced by treatment with chaulmoogra oil. The treatment, however, was attended with many difficulties and could not be carried out in all cases. At this point the Public Health Service enlisted the cooperation of Prof. L. E. Dean, head of the chemical department of the College of Hawaii and president of that institution, suggesting that attempts be made either to isolate the active constituent of the drugs or to devise means for making its continued administration feasible. The latter has been accomplished by preparing what is known as an "ethyl ester" from the chaulmoogra oil. The treatment has been carried on at the Leprosy Investigation Station at Kalihi, Hawaii, the work being directed by Dr. J. T. McDonald, director of the station.

The results of the treatment thus far have been so satisfactory that lepers come willingly for treatment, a recent inspection by Hawaiian health authorities failing to disclose a single secreted case of leprosy. Following a course of treatment extending over about a year, forty-eight lepers, treated according to the new method, were paroled in October, 1919. Up to now they have remained free from disease.

At the present time the treatment has been administered only at the receiving station, but it is hoped to provide facilities for the treating of lepers in the leper colony at Mo'okai. Surgeon-General Cumming's announcement relates to lepers who have been treated by this new method and have been under observation for a considerable period. Moreover, the decision as to apparent cure has, in the case of each patient, been officially determined, not by officers of the Public Health Service but by a special parole board which alone has authority to discharge a patient from custody. The Public Health Service is now conducting a very careful study of the treatment, making detailed records of all the cases and taking photographs of the lesions once a month.

SANITATION AND GOOD WORK

Nothing annoys a patient who has made an autodiagnosis of heart disease, brain fog or lung trouble, as much as to be told that the whole source of mischief lies in constipation or his kidneys. It is the same with many social industrial reformers. They study fatigue and

efficiency, mind measuring, better hours, better homes, but, if told that toilet rooms, revolting in appearance and difficult of access, were often accountable for faulty work and discontent, they would not believe. But, for the Safety Institute of America no study is insignificant, and they consider a decent sanitary equipment as a valuable asset to any work place. Employees reluctantly yield to Nature's demands when the toilet is uncleanly, and it is hard for them at the end of the day, if they have to go unwashed among the people on crowded cars and ferries. Toilet rooms should be placed where they are exposed to light and air. Sunlight is a powerful germicide and disinfectant. If artificial light has to be used it should penetrate to every corner, so showing up dirt and inducing thorough cleanliness by flushing or scrubbing the floor. It should be easily accessible, yet not too prominent, because some false modesty still exists, many girls saying they would rather die than walk to an obvious toilet through a room crowded with men. These do die generally of architectural blunders, though relations term it stomach trouble, and vendors of patent medicines grow rich from the sale of headache powders and liver tonics, the necessity for which is not in hard work but wretched sanitary equipment.—*New York Medical Journal*, July 10, 1920.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

LOOK for the complete program for the South Bend Session in the September number of THE JOURNAL.

REMEMBER the South Bend Session! It comes Wednesday, Thursday and Friday, September 22, 23 and 24. The September number of THE JOURNAL will contain the program and all official announcements. You will receive no other announcements or invitations concerning the session.

WE desire to thank numerous members of the Association who kindly sent us their June copies of *THE JOURNAL* for the purpose of completing our files. We happened to run short of copies of the June number, and but for the generosity of those who returned their copies we would have been without a sufficient number for filing purposes.

AND still the price of everything goes up. There is nothing in the way of commodities or ordinary service that has not doubled, trebled, or quadrupled in price during the past year. Yet some doctors think they must charge but a trifle more for their services than they ever have before, and they "knock" other doctors who feel that the present cost of living demands an increase in income through increased prices for professional services rendered.

ONE of our members complains because our dues are not larger so we can do more for the profession, and he points out that the chiropractics and some other pseudo medical cults pay dues of two and sometimes three and four times as much as we do and think nothing of it. They are accomplishing something for their cults, too, as they are able to pay for services. It takes money to accomplish most anything and nowadays a dollar is a rather cheap thing.

You have a shilling. I have a shilling. We swap. You have my shilling and I have yours. We are no better off. But suppose you have an idea and I have an idea. We swap. Now you have two ideas and I have two ideas. We have increased our stock of ideas 100 per cent.—A. S. Gregg. Doctor, do not be so egotistical as to believe you can not be helped as well as helping others by supporting whole heartedly your local society and attending every meeting.—*The Charlotte Medical Journal*, July, 1920.

IT is very evident that our committee on Industrial and Civic Relations is going to have plenty to do from this time forth. There are many problems to be solved in connection with our relation to industrial and civic affairs, and many of these problems are concerned with the economic relations of the members of the medical profession. This is particularly true concerning the compensation laws that have been enacted or are about to be enacted, as well as the proposed compulsory health insurance. The

committee should be alert, and not only thoroughly study the questions at issue, but be prepared to present a comprehensive report to the Association and offer suitable recommendations.

THROUGH county medical society secretaries or some other round-about way we frequently hear that some doctor is not receiving *THE JOURNAL* when he is entitled to it. As stated many times in the editorial columns, it is only necessary to write direct to us concerning failure to receive *THE JOURNAL* in order to have the request given prompt attention. While occasionally journals go astray in the mails, yet for the most part the complaint concerning failure to receive *THE JOURNAL* is found to be due to failure on the part of the subscriber to notify us of change of address, or worse still, failure on the part of the subscriber to pay his subscription as promptly as necessary in order to keep his name on the mailing list. However, no matter what the cause, we are very glad to investigate any complaint promptly and give the same the attention justified.

THE free venereal clinics are another species of charity which while ostensibly worthy of recommendation and support are, in the main, a detriment to the medical profession as a whole and a source of economic loss to many individuals in the profession. However, one of the worst features about the free venereal clinics is that some of them are conducted in a manner which discredits the work of reputable physicians engaged in private practice, and therefore are bound to meet with more or less antagonism unless the methods of operation are changed. It certainly is not conducive to harmony and a spirit of helpfulness to have those in charge of the free venereal clinics, oftentimes young and inexperienced chaps, doubt the diagnoses made from clinical findings and laboratory tests by reputable medical men, and convey these doubts to the patients, sometimes with unjust and unwarranted criticism, and yet that is exactly what occurs occasionally. The free venereal clinics may have a place in our social system but they ought to be conducted with due respect for the ethics of the medical profession.

WHEN we consider the stupendous amount of work the American Red Cross accomplishes every year and we read of their plans for the coming year we realize that they deserve the assistance and cooperation of every medical

man in the country. The Fourth Red Cross Roll Call, to be held from Armistice Day, November 11, to Thanksgiving Day, November 25, this year, should receive the moral support and assistance of Indiana physicians. The membership of this organization now numbers 10,000,000, or twenty times the pre-war membership. The membership dollars are to be used to further the gigantic peace time activities of the American Red Cross, which are as follows:

To continue work for America's veterans of the World War, particularly the disabled.

To serve our peace-time Army and Navy.

To develop stouter national resistance to disease through health centers.

To increase the country's nursing resources and to cooperate with official health agencies.

To continue preparedness for disaster relief.

To continue home service and community work.

To complete relief work among the war-exhausted and disease-ridden people of Europe.

WALTER C. ALLEN, in the July issue of *Modern Medicine*, gives the following report concerning the use of silver salvarsan sodium in the treatment of syphilis by German physicians:

Kolle, in Germany, has recently introduced silver salvarsan sodium in the treatment of syphilis. Preliminary experimentation as to the therapeutic value of the drug in syphilis was made with rabbits. It is understood that Kolle placed generous quantities of the drug in the hands of German clinicians so that now the leading German medical periodicals are reporting the observations of these clinicians. It is stated that this new antisyphilitic agent is more harmless than old salvarsan because the effective dose, 0.2 to 0.3 gm., is below the danger point for arsenic. The arsenic content of silver salvarsan is reported as 22.5 per cent., with 14 per cent. silver. This arsenic content is about two-thirds that of old salvarsan. Silver is reported as a catalytic to the arsenobenzol molecule, and is also said to reinforce the specific action of arsenic on the spirochaeta. It is claimed that silver salvarsan acts rapidly, is well borne, and that it has been used without severe reactions. From 1 to 1.4 gm. is considered sufficient for a single course of treatment. Delbanco reports 550 injections of the drug without untoward reaction. Boas and Kissmeyer reported the use of 400 tubes of silver salvarsan in sixty-two syphilitics and think it equal to old salvarsan. Korsbjerg used it on thirty-two patients with favorable results.

WE desire to remind the medical men of Indiana that the advertising in *THE JOURNAL* is worthy of consideration and we urge a careful perusal of the advertising as well as the reading pages. We also urge our readers

to mention *THE JOURNAL* when writing advertisers, as such a practice proves beneficial to all concerned. While it is not our intention to single out any advertising for particular notice yet we feel disposed to call attention to the advertising of our professional friends, and especially those who are maintaining ethical hospitals, sanitariums, and laboratories that of necessity derive their patronage from recommendation of members of the medical profession. Some of our confrères out of the state are advertising in *THE JOURNAL*, and we especially commend them to the medical men of Indiana and urge that whenever consistent their claims for patronage are to be considered favorably. In connection with this matter of advertising patronage permit us to say that the cost of publishing *THE JOURNAL* has gone up by leaps and bounds, and were it not for the advertising patronage we would be forced to suspend publication. Therefore, in the interest of a continuation of *THE JOURNAL* in its present size and character we urge the medical men of Indiana to patronize the advertisers whenever possible, as such course will prove mutually beneficial.

THE Michigan State Medical Society, through its House of Delegates, at its recent annual session, directed that an intensive membership drive be conducted during the month of October, the purpose being to obtain as members every eligible physician in the state. In answer to the question, Why a membership drive? the *Journal of the Michigan State Medical Society* gives the following:

1. Our state society should include and be representative of all the eligible physicians in Michigan.
2. Organized effort, influence and prestige alone will serve to conserve our individual interests in these days of changing relationship in the social and industrial world.
3. Legislative measures affecting our relationship to the public and our personal prerequisites will be introduced into the legislature this coming session. Our committee, protecting your interests, will exercise greater influence and accomplish desired results if they can exhibit their requests as coming from the entire profession of Michigan.
4. Larger county societies, composed of all the eligible physicians in the county, will accomplish greater results in the respective localities.

Their plan is for each county society to appoint a "Drive Committee" which will list all the eligible nonmembers of their country, a certain number of these names being assigned to each member for personal solicitation. This intensive effort on the part of the Michigan

society should prove fruitful, and the results will be watched with interest by many states that could profitably inaugurate a similar drive.

THROUGH newspaper accounts we learn that at the annual convention of the American Osteopathic Association, held in Chicago the first week in July, a newly discovered method of treating the eyeball osteopathically was offered for consideration. For instance, it was announced that errors of refraction could be cured by osteopathic treatment, and that by such treatment it was possible to avoid the use of glasses in 90 per cent. of all cases. Further announcement was made that osteopathic treatment would cure a large percentage of the cases of glaucoma, and that many other serious eye diseases were amenable to the new manipulation which the osteopaths call "finger surgery." Very naturally the discussion of this subject did not embrace the etiology or pathology of the diseases or conditions for which finger surgery was recommended, and it is questionable if any very trustworthy evidence was offered to substantiate the claims. The worst feature about the whole business is that these false assumptions will be given due publicity by nearly all osteopaths, with the intent and purpose of attracting those who are seeking relief for the diseases or conditions enumerated. The unfortunate part of the matter is that there will be people suffering from eye strain, simple glaucoma, and perhaps some other diseases and conditions which are amenable to proper treatment, who will be led astray by the glowing accounts of the results secured from "finger surgery" and not take the trouble to find out whether or not the claims have been properly substantiated.

THE John B. Murphy Memorial Association, under the presidency of Dr. Edward N. Hurley and secretaryship of Dr. W. A. Evans, has proposed a John B. Murphy Memorial Hall of the American College of Surgeons, to be erected on vacant ground adjacent to the new home of the American College of Surgeons in Chicago, at a cost of \$500,000. Dr. John B. Murphy, whose death occurred Aug. 11, 1916, possessed an international reputation, and his worth and leadership has been summarized as follows: "Gifted with extraordinary native ability, he concentrated on a great struggle to realize his ideal of a life full of useful service. He mastered the fundamental principles and the

mechanical technic of an exacting science. By drill and discipline he became master in the fields of the art and science of medicine, and solved by original investigation the intricate problems of his art. His contemporaries acknowledge that the scientific contributions of Dr. Murphy for the advance of medicine and surgery have never been equaled, either in range or in worth, by any other individual in the profession. As a teacher with power to inspire young men to their greatest usefulness, both in the science of medicine and as citizens, Dr. Murphy stood without peer. His charm, kindness, force, and the ability to untangle difficult propositions by simple, clear-cut exposition, gave him rank as the great surgical teacher of his age. He went from task to task with complete simplicity. He was the good neighbor; he chose his friends for their honor and worth, not for their position or reputation. His greatest pleasure was attained in his home with his wife and children. Dr. Murphy was true to his convictions. He possessed a clean conscience, a profound religious sense and a constant devotion to the church of which he was a communicant." Members of the American College of Surgeons, of which Dr. Murphy was a Fellow and enthusiastic worker, are asked to contribute \$200,000 of this amount, in individual subscriptions of \$1,000 each, lay friends of the deceased are expected to give \$200,000, and \$100,000 already has been pledged, making the total estimated cost of the memorial building.

WHEN one stops to think of the manner in which our government is criminally extravagant in spending money, how unjust much of our taxation is, and how inefficient is much of the government service, with the overabundance of unnecessary and inconsistent red tape and official tom-foolery, we wonder that there are not more Bolsheviks in this country and we also can find ample excuse for the growth of socialism. On the other hand, when we take into consideration the present chaotic condition of all the European nations and the burdens which the people of those nations have to bear, we are inclined to believe that after all America is a pretty good place to live. However, we can make it better, and one way to do it is by putting into public office more men of ability and integrity who will have some respect for the rights and the pocketbooks of the people. Just at the present moment we also need to have impressed on a great portion of the American people the fact that we cannot prosper, in fact

we cannot live decently, unless more of the American people go to work. Just now there are altogether too many people who, if they work at all, have an idea that they can work five or six hours a day for about three days of each week and then play the balance of the time. Others seem to think the world owes them a living, and therefore it is not necessary to work at all. Both of these classes are a menace to the welfare of our country, and the sooner we make them understand that they have to work like the rest of us the better it will be for all concerned. The medical man, always a hard worker and never accustomed to watching the clock, is interested in the establishment of a stable condition of affairs, and his influence should be felt in his immediate community. In fact, he ought to be one of those who preach the doctrine of a just reward for those who work, and punishment for the drones and disturbers. At the coming November elections an opportunity will be offered to select men for public office who represent certain policies. In everything but state and national issues we ought to vote for men rather than policies, but in considering policies it is not a bad idea to consider the record that has been made by the parties that have been in power. For that reason we urge our medical friends to study the situation from an unbiased standpoint and with an eye to the public good. Party politics are good only when they represent that which we honestly feel are for the best interests of the people at large.

DEATHS

SALONA KREIDER, wife of Dr. M. K. Kreider of Goshen, died July 20, aged 70 years.

JOHN M. WARD, M.D., formerly of Winamac and Kewana, Ind., died recently at Manchester, Tenn.

ANNA WILSON KITTINGER, widow of the late Dr. Henry Kittinger of Winamac, died July 10, aged 79 years.

EARL P. WAGNER, M.D., of South Bend, died July 1, aged 46 years. Dr. Wagner was graduated from the University of Illinois Medical College, Chicago, in 1907. He was a member of the St. Joseph County Medical Society, the Indiana State Medical Association and the American Medical Association.

LUTHER ZWINGLI BREAKS, M.D., of Terre Haute, died suddenly, July 10, aged 41 years. Death was due to an attack of heart disease. Dr. Breaks was graduated from the Rush Medical College, Chicago, in 1901. He was a member of the Vigo County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. FOSTER BUCKNER of Bluffton has recently removed to Fort Wayne for the practice of medicine.

DR. HERMAN W. SMELSER of Connersville, is spending some time in Chicago, taking post-graduate work.

ANNOUNCEMENT has been made that U. S. General Hospital No. 28, at Fort Sheridan, Ill., will probably be closed October 1.

DRS. J. W. SCHMADEL AND M. L. CURTNER, Vincennes, have formed a partnership for the practice of medicine and surgery.

DR. JOHN F. TAYLOR of Geneva, formerly of Cross Plains, has purchased property in St. Paul and will retire from active practice.

DR. MILTON C. WINTERITZ has been elected dean of the Yale School of Medicine, to succeed Dr. George Blumer, who resigned recently.

THE plans for the new nurses' home at the Indianapolis City Hospital are to be drawn up by William Earl Russ, Indianapolis architect.

DR. W. A. BUCHANAN and wife of Hammond left July 12 for an automobile tour along the Atlantic Coast, between Washington and Boston.

MISS ALICE DICKENS AND DR. GEORGE BONER, both of Indianapolis, were married, June 28, in Indianapolis. Their future residence will be in Washington, Ind.

LIEUTENANCY, junior grade, in the Medical Corps of the United States Naval Hospital, League Island Navy Yard, has been conferred on William Harris Funk of South Bend.

DR. M. R. STARK of Knightstown and Miss Dorothy Cook of Greenfield were married, June 25, at the home of the bride in Greenfield. Their future residence will be at Knightstown.

A BILL has been passed by the house in special session in Indianapolis, July 20, requiring that health certificates be presented to the county clerk by applicants for marriage licenses.

DR. AMZI WEAVER, Corydon, has tendered his resignation as trustee of Posy Township and will remove to Louisville for the practice of medicine. His son will fill his position as trustee.

THE Vermilion County Hospital Board is the recipient of a gift of \$10,000 from H. M. Ferguson, president of the board. This amount is to supplement \$100,000 which the county voted to build a hospital.

THE Sacred Heart Hospital, Garrett, is to have some extensive improvements and redecorating in the near future. Every room in the building and the halls and corridors will be repainted and redecorated.

THE Goshen Hospital was reopened, July 1, with a sum of \$2,300, which was raised by subscription in various ways. While the sum raised will make possible the opening of the hospital, it was not as large as had been hoped and really needed.

IN a certain Bulgarian hospital modern operations are being performed with chipped flints in the absence of surgical instruments. However, a great number of supplies have been shipped to the hospital and will soon relieve the deplorable situation.

THE Daviess County Hospital was operated during the year ending May 30 at a loss of \$1,006, according to the annual report of the treasurer of the hospital board. Advancing prices caused the big deficit. The hospital fees are to be increased.

THE Clinton County Medical Society was entertained last evening at the country home of Dr. S. B. Sims, near Mulberry. About twenty-five members with their families were present. The feature of the affair was a picnic supper served on the lawn.

DR. LACEY L. SHULER of the 1919 class Indiana University School of Medicine, announces the opening of an office at 510-511 Hume-Mansur Building, Indianapolis, where he will be associated in the practice of medicine with Dr. John H. Oliver.

A DRIVE on rats and mice started in Columbus in June and continued until July 15. The city health board's office is headquarters for the campaign which is being assisted by the Chamber of Commerce, civic organizations, school children and Boy Scouts.

DRS. AUGUST O. TRUELOVE and Don J. Royer announce the opening of the Tri-State Diagnostic Laboratories at 219 West Wayne Street, Fort Wayne. They have special x-ray equipment for doing bedside work, radiology, basal metabolism, clinical microscopy, etc.

THE members of the Fort Wayne Medical Society enjoyed a half holiday on June 29. The afternoon was spent in athletics at the Elks' Country Club and a chicken dinner prepared by the club chefs was served to the members and their wives in the evening.

THE week beginning July 20 was called "Child Health Week" at Winona Lake, where the infant and child hygiene division of the state board of health conducted a daily program, including lectures and demonstrations and examinations of children up to 16 years of age.

BUBONIC plague is continuing in Texas and Florida, according to reports. Last advices were to the effect that eight cases have occurred in Austin, with three deaths; at Galveston there have been three cases of plague, with two deaths, and there have been four cases in Pensacola, Fla.

DR. S. GRIFFITH DAVIS, of the Research Committee of the National Anesthesia Research Society, has been appointed professor of

anesthesia in the University of Maryland. So far as records are available, this is the first professorship of anesthesia to be created in the United States.

THIRTEEN student nurses of the Deaconess Hospital Training School, Indianapolis, gave notice to the officials of the institution that because of conditions under which they are required to work they would leave the hospital Monday, July 7. The nurses transferred to the City Hospital.

INDIANAPOLIS is to have four new tuberculosis clinics—three additional day clinics and additional night clinic. Additional clinics become necessary with the steadily increasing population of the city. One of the clinics to be established will be for the colored people of the city.

ALL but three of the 159 nurses who took the state examination for registered nurse's license were successful, as announced by the state board of registration and examination of nurses. Miss Grace Pitt of the Robert W. Long Hospital made the highest grade with an average of 98 per cent.

THE spring cleanup campaign in 170 Ohio towns resulted in the elimination of 3,023 fire hazards and 4,779 menaces to health, according to State Fire Marshall, W. J. Leonard. Permanent results were obtained in 129 of the towns, and in the same number, fire prevention education is reaching into homes.

THE Catholic Hospital Association at St. Paul has decided that ether with nitrous oxide is the safest anesthetic, according to correspondence from the National Anesthesia Research Society. Chloroform was in disfavor because of the large number of casualties from anesthesia said to result from its use.

THE New York City Board of Health has recently passed regulations to prevent the escape of rats from vessels docking at the New York port and within the last year special efforts have been made to closely apply them. These regulations were deemed necessary to prevent the spread of the bubonic plague.

THE officers of the National Anesthesia Research Society have been advised of several research workers who will present the results of their experiments and observations at the annual meeting of the society at Hotel William Penn, Pittsburgh, October 4-8. Prizes aggregating \$200 have been offered for the best research papers submitted.

AT the May meeting of the Medical Society of the District of Columbia the following resolution was adopted:

Resolved, That the Medical Society of the District of Columbia go on record as in favor of the limitation of the practice of anesthesia to regularly licensed physicians and surgeons, dentists, and graduate nurses in cases of emergency, or medical students for the purposes of instruction.

THE Methodist Episcopal Hospital Clinical Research Society has been organized by the physicians and surgeons who attend patients in the Methodist Episcopal Hospital, Indianapolis. Among other things a clinical record will be required to be written for every patient in the hospital. Also, members of the society must classify themselves as to the line of work which they prefer to follow.

DR. FRANK B. WYNN, Indianapolis, along with a few members of the Nature Club, of which he is president, left, July 24, on a semi-official exploration tour of Glacier National Park. The purpose of the trip is to chart the mountains of the region for climbing purposes. They will make ascents, take data as to altitudes, routes taken, etc., and the government will publish the data thus obtained.

THE Japanese medical schools were highly praised by Dr. Jacob Gould, who retires as the active head of Cornell University this month. He says a very close relationship is maintained between the medical school and the hospital in Japan. They are masters in sanitation. Their medical students are chosen by a selective process which develops the best material, and it is only after a most thorough examination that the student is permitted to proceed with his work.

MORE than 300 scientific research laboratories are in existence in the United States, according to a bulletin just issued by the National Research Council. Industrial research laboratories

have increased notably since the beginning of the war and it was only by a swift development of scientific processes that the Allies and America were able to put themselves in a position first to withstand and then to win a victory over Germany's science-baked armies and submarines.

DR. H. H. WRIGHT, an expert of New York City, after an investigation, recommended that Indiana have a new law on the insane and suggested the following: That patients at Julietta, insane county hospital, be transferred to the state hospitals for the insane; that laws be passed at once by the state legislature prohibiting jails or almshouses from accepting insane patients; that needed appropriations be made to increase the capacity of the state insane hospitals, and numerous other improvements.

NAPHTHYLAMIN crystals are used to kill body lice by sprinkling them down a man's neck between his shirt and skin. Powdered sulphur, generally in the form of an ointment, is used against the itch mite. Mercurial ointment is used against the pubic louse by rubbing it in the affected part night and morning. Various solutions, such as 1:500 solution of mercury bichlorid and 5 per cent. phenol, are used to kill insects, and liquor formaldehyd is used quite extensively in fly traps, although the gas formaldehyd is not an insecticide.—*U. S. Nav. M. Bull.*, January, 1920.

AN institution called the Plant Protection Institute, composed of a cooperative body of scientific experts on injurious insects and plant diseases and of manufacturers of insecticides, fungicides, and general chemicals and apparatus, has recently been organized. This organization is to be active in the work of conservation of plants, crops, shade trees, and so forth. Much excellent work along this line is now being done by government and state organizations, and it is in this general direction of cooperative work that the Plant Protection Institute expects to be most active.

During July the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Armour & Co.: Tablets Anterior Pituitary 5 grains. Tablets Ovarian Substance 5 grains.

Hynson, Westcott & Dunning: Lutein, Sterile Solution of Ovarian Residue-H. W. D. Tablets Ovarian Residue-H. W. D.

Merck & Co.: Benzyl Benzoate (Merck).

Organic Salt & Acid Co.: Benzyl Benzoate (Organic Salt & Acid Co.).

Seydel Manufacturing Co.: Benzyl Benzoate (Seydel).

E. Fougera & Co.: Riodine.

At the annual meeting of the American Laryngological, Rhinological and Otological Society, held in Boston on June 2, 3 and 4, the following officers were elected: President, Dr. Lee Wallace Dean, Iowa City; vice presidents, Dr. Harmon Smith, New York, chairman of eastern section; Dr. Joseph C. Beck, Chicago, chairman of middle section; Dr. Joseph B. Greene, Asheville, N. C., chairman of southern section; Dr. William V. Millin, Colorado Springs, chairman of mid-western section; Dr. Ewing W. Day, Pittsburgh, treasurer; Dr. William H. Haskin, New York, secretary; Dr. George L. Richards, Fall River, Mass., chairman of Publication Committee.

THE New York City Health Department tested 150 thermometers, obtained from doctors and nurses, to determine the reliability of clinical thermometers in use and on sale in the city. Of these, eighty-four, or 54 per cent., were found defective, and seventy-two, or 46 per cent., acceptable. With this information in mind, an appropriate amendment to the Sanitary Code and regulations to govern the sale of clinical thermometers in the city are under consideration by the board of health. A conference was recently called of clinical thermometer manufacturers, and the manufacturers agree to abide by certain modifications of the regulations imposed by the health department.

WOOD ALCOHOL POISONING.—The Public Health Committee of the New York Academy of Medicine, after several conferences with representatives of the wood alcohol industry, the National Committee for the Prevention of Blindness, and the Section on Ophthalmology of the Academy, has made the following preliminary recommendations: 1. That a federal law be passed for the control of the manufacture and sale of wood alcohol by the use of license and bond to be required of all those who manufacture and distribute it. 2. That the word "alcohol" be eliminated from the trade name of

methyl alcohol, and that it be made known by some other designation. 3. That the rules governing the preparation of "completely denatured" alcohol be changed so as to allow a much smaller percentage of methyl alcohol than has been customary hitherto, and that the wood alcohol used be of a crude grade, as in this state the wood alcohol is less toxic and less potable. 4. That a more satisfactory method be devised for the control of the distribution of the "completely denatured" alcohol. 5. That the city department of health be urged to take the necessary steps for the strict enforcement of the provision of the sanitary code, which requires the placing of a poison label on all containers of wood alcohol. 6. That local measures be adopted which forbid druggists to sell pure methyl alcohol and which would restrict them to the sale of medicated and denatured alcohol only. 7. That the Commissioner of Internal Revenue be requested to cause a revision of the existing formulae for medicated alcohol with a view to simplifying them and making them more adaptable to the several medical uses for which medicated alcohol is intended.

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County	Secretary	Date
1.	Decatur,	C. R. Bird.....	Feb. 1, 1920
2.	Fayette,	R. H. Elliott.....	Feb. 1, 1920
3.	Franklin,	E. M. Glaser.....	Feb. 1, 1920
4.	Fulton,	A. E. Stinson.....	Feb. 1, 1920
5.	Jasper-Newton,	O. E. Glick.....	Feb. 1, 1920
6.	Jefferson,	O. A. Turner.....	Feb. 1, 1920
7.	Marshall,	Harry Knott.....	Feb. 1, 1920
8.	Posey,	John Ranes.....	Feb. 1, 1920
9.	Shelby,	F. E. Bass.....	Feb. 1, 1920
10.	Sullivan,	J. B. Maple.....	Feb. 1, 1920
11.	Union,	J. D. Shonwald.....	Feb. 1, 1920
12.	Warrick,	J. F. Samples.....	Feb. 1, 1920
13.	Washington,	Claude B. Paynter.....	Feb. 1, 1920
14.	Wells,	G. B. Morris.....	Feb. 1, 1920
15.	Whitley,	H. M. Egoft.....	Feb. 1, 1920
16.	Delaware-Blackford,	H. D. Fair.....	March 1, 1920
17.	Hancock,	C. H. Bruner.....	March 1, 1920
18.	Knox,	D. H. Richards.....	March 1, 1920
19.	Madison,	Doris Meister.....	March 1, 1920
20.	Monroe,	J. E. P. Holland.....	March 1, 1920
21.	Scott,	J. P. Wilson.....	March 1, 1920
22.	White,	H. B. Gable.....	March 1, 1920
23.	Marion,	Leslie H. Maxwell.....	April 1, 1920
24.	St. Joseph,	R. B. Dugdale.....	April 1, 1920
25.	LaGrange,	A. J. Hostetler.....	April 1, 1920
26.	Miami,	M. L. Wagner.....	April 1, 1920
27.	Steuben,	Mary Ritter.....	April 1, 1920
28.	Tippecanoe,	W. M. Reser.....	April 1, 1920
29.	Wabash,	L. O. Sholty.....	April 1, 1920
30.	Fountain-Warren,	A. M. Sullivan.....	May 1, 1920

31.	Henry, W. H. Stafford.....	May 1, 1920
32.	Jay, C. A. Paddock.....	May 1, 1920
33.	Montgomery, A. L. Loop.....	May 1, 1920
34.	Vanderburgh, William E. Barnes.....	May 1, 1920
35.	Bartholomew, H. H. Kamman.....	June 1, 1920
36.	Dearborn-Ohio, E. J. Libbert.....	June 1, 1920
37.	Huntington, F. B. Morgan.....	June 1, 1920
38.	Vigo, W. D. Asbury.....	June 1, 1920

REVISED CONSTITUTION AND BY-LAWS OF THE INDIANA STATE MEDICAL ASSOCIATION

(Offered at the Indianapolis Session, 1919, for Adoption at the South Bend Session, 1920)

ARTICLE I.—NAME OF THE ASSOCIATION

The name and title of this organization shall be the Indiana State Medical Association.

ARTICLE II.—PURPOSES OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Indiana, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES

Component Societies shall consist of those county medical societies which hold charters from this Association.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

SECTION 1.—This Association shall consist of Members, Delegates, Guests, and Associate and Honorary Members.

SEC. 2.—*Members.*—The members of this Association shall be the members of the component county medical societies.

SEC. 3.—*Delegates.*—Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Association.

SEC. 4.—*Associate Members.*—Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association.

SEC. 5.—*Honorary Members.*—Honorary members shall consist of representative teachers and students of science allied to medicine, and of physicians and surgeons of distinction not members of the Indiana State Medical Association, who may by vote of the House of Delegates be elected to honorary membership.

SEC. 6.—*Guests*.—Any distinguished physician not a resident of this state who is a member of his own State Association may become a guest during any Annual Session on invitation of the officers of this Association, and shall be accorded the privilege of participating in all of the scientific work for that session.

ARTICLE V.—HOUSE OF DELEGATES

The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; (3) the ex-Presidents of the Indiana State Medical Association, and (4) *ex officio*, the President, the Secretary, and the Editor of THE JOURNAL of this Association, all without power to vote, except in case of a tie vote when the president shall cast the deciding vote.

ARTICLE VI.—COUNCIL

The Council shall consist of the Councilors, and the President, Secretary, and Editor of THE JOURNAL, *ex officio*. Besides its duties mentioned in the By-Laws, it shall constitute the Finance Committee of the House of Delegates. Five Councilors shall constitute a quorum.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII.—SESSIONS AND MEETINGS

SECTION 1.—The Association shall hold an Annual Session during which there shall be held daily general meetings, and such section meetings as may be provided for, all of which shall be open to all registered members and guests.

SEC. 2.—The time and place for holding each annual session shall be fixed by the House of Delegates.

ARTICLE IX.—OFFICERS

SECTION 1.—The officers of this Association shall be a President, three Vice Presidents, a Secretary-Treasurer, and thirteen Councilors.

SEC. 2.—The officers, except the Councilors, shall be elected annually. The President shall appoint the first Councilors to serve for one year, or until their successors are elected. The terms of elected Councilors shall be for three years, those first elected serving one, two and three years, as may be arranged. All of these officers shall serve until their successors are elected and installed.

SEC. 3.—The officers of this Association shall be elected by the House of Delegates on the morning of the last day of the Annual Session, but no delegate shall be eligible to any office named in the preceding section, except that of Councilor, and no person shall be elected to any such office who is not in attendance on that Annual Session, and who has not been a member of the Association for the past two years.

SEC. 4.—The Councilors shall be elected by the respective district societies, providing that if any dis-

trict shall exist without a society the Councilor for such a district shall be elected by the House of Delegates. Provided further, that if a Councilor district society fails to meet and elect its Councilor, the Councilor for that district shall be elected by the House of Delegates.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES

In order to broaden professional fellowship this Association is ready to arrange with other State Medical Associations for an interchange of certificates of membership, so that members moving from one state to another may avoid the formality of reelection.

ARTICLE XI.—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates, but shall not exceed the sum of \$5 per capita per annum, except on a four fifths vote of the delegates present. Funds may also be raised by voluntary contributions, from the Association's publications, and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publication, and for such other purposes as will promote the welfare of the profession. All motions and resolutions appropriating funds must be referred to the Council for approval before final action is taken thereon.

ARTICLE XII.—REFERENDUM

SECTION 1.—A General Meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association, who may vote by mail or in person, and if the members voting shall comprise a majority of all the members of the Association, a majority of such vote shall determine the question and be binding on the House of Delegates.

SEC. 2.—The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in THE JOURNAL of this Association.

BY-LAWS

CHAPTER I.—MEMBERSHIP

SECTION 1.—Any physician who is a member in good standing of a component county society and who has paid to this Association his annual dues is a

member in good standing of the Indiana State Medical Association.

SEC. 2.—Any person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

SEC. 3.—Each member in attendance at the Annual Session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

CHAPTER II.—ANNUAL AND SPECIAL SESSIONS OF THE ASSOCIATION

SECTION 1.—The Association shall hold an Annual Session at such time and place as has been fixed by the House of Delegates at the preceding Annual Session.

SEC. 2.—Special sessions of either the Association or of the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

CHAPTER III.—GENERAL MEETINGS

SECTION 1.—All registered members may attend and participate in the proceedings and discussions of the General Meetings and the meetings of the Sections. The General Meetings shall be presided over by the President or by one of the Vice Presidents, and before them shall be delivered the address of the President and the orations, unless the Scientific Committee, with the sanction and approval of the officers shall arrange otherwise.

SEC. 2.—The General or Section Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

CHAPTER IV.—HOUSE OF DELEGATES

SECTION 1.—The House of Delegates shall meet at 7 p. m. on the day before that fixed as the first day of the Annual Session. It may adjourn from time to time as may be necessary to complete its business, provided that its hours shall conflict as little as possible with the General or Section Meetings. The order of business shall be arranged as a separate section of the program.

SEC. 2.—Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members, and one for each major fraction thereof, but each component society which has made its annual report and paid its assessments as provided in this Constitution and By-Laws, shall be entitled to one delegate.

SEC. 3.—Twenty delegates shall constitute a quorum.

SEC. 4.—It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 5.—It shall divide the state into Councilor Districts, specifying what counties each district shall include, and when the best interests of the Association and profession will be promoted thereby, organize in each a district medical society, and all members of component county societies, and no others, shall be members of such district societies.

SEC. 6.—It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

SEC. 7.—It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

SEC. 8.—Funds may be appropriated by the House of Delegates, subject to approval by the Council, for such purposes as will promote the welfare of the Association and the profession.

CHAPTER V.—ELECTION OF OFFICERS

SECTION 1.—All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect.

SEC. 2.—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the Session.

SEC. 3.—Any person known to have solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years.

CHAPTER VI.—DUTIES OF OFFICERS

SECTION 1.—The President shall preside at all General Meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the state during his term of office, and as far as practicable, shall visit by appointment the various sections of the state and assist the Councilors in building up the county societies, and in making their work more practical and useful.

SEC. 2.—The Vice Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Council shall elect one of the Vice Presidents to succeed him.

SEC. 3.—The Treasurer shall give bond in the sum of \$10,000. He shall demand and receive all funds due the Association, together with the bequests and donations. He shall pay money out of the Treasury only on a written order of the President, countersigned by the Chairman of the Finance Committee of the Council; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands.

SEC. 4.—The Secretary shall attend the General Meetings of the Association, and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings in separate record books. He shall be *ex officio* Secretary of the Council. He shall be custodian of all record books and papers belonging

to the Association, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Association which come into his hands. He shall provide for the registration of the members and delegates at the Annual Session. He shall, with the cooperation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the state by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the Council, and shall make an annual report to the House of Delegates. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessments, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Council.

CHAPTER VII.—COUNCIL

SECTION 1.—The Council shall meet on the day preceding the Annual Session, and daily during the Session; in January, and at such other times as necessity may require, subject to the call of the chairman, or on petition of three Councilors. It shall meet on the last day of the Annual Session of the Association to organize and outline work for the ensuing year. It shall elect a chairman and a clerk, who, in the absence of the Secretary of the Association, shall keep a record of its proceedings. It shall, through its chairman, make an annual report to the House of Delegates.

SEC. 2.—Each Councilor shall be organizer, peace-maker, and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district the same to be published in the number of *THE JOURNAL* which is issued immediately preceding the Annual Session, and the report should be approved by the House of Delegates, with such recommendations as seem indicated. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the Council on a properly itemized statement, but this shall not be construed to include his expense in attending the Annual Session of the Association.

SEC. 3.—It shall, through its officers, and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Session a stepping stone to future ones of higher interest.

SEC. 4.—It shall, in connection with the House of Delegates consider and advise as to the material interests of the profession and of the public in those important matters wherein it is dependent upon the

profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

SEC. 5.—It shall make careful inquiry into the condition of the profession of each county in the state, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until every physician in every county of the state who can be made reputable has been brought under medical society influence.

SEC. 6.—It shall encourage postgraduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

SEC. 7.—It shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

SEC. 8.—In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

SEC. 9.—The Council shall be the board of censors of the Association. It shall consider all questions involving the rights and standings of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General or Section Meetings shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

SEC. 10.—The Council shall provide for and superintend all publications of the Association, and shall have authority to appoint an editor and such assistants as it deems necessary, and fix the amount of their salaries. The proceedings of the Council for the year shall be reported to the House of Delegates at the annual session, and be published in the number of *THE JOURNAL* which immediately precedes the Annual Session.

SEC. 11.—In the interim between the sessions of this Association the Council shall be the executive body of the Association with full power to fill vacancies or transact any business that emergencies or the welfare of the Association may require.

CHAPTER VIII.—COMMITTEES

SECTION 1.—The standing committees shall be as follows:

- A Committee on Arrangements.
- A Committee on Scientific Work.
- A Committee on Medical Defense.
- A Committee on Public Policy and Legislation.
- A Committee on Industrial and Civic Relationship.
- A Committee on Medical Education.

Such committees, except the one on Medical Defense, which is elected by the House of Delegates, shall be appointed by the President of the Association, and the President and Secretary of the Association shall be *ex officio* members of standing committees. The President also may appoint such other committees as may be necessary.

SEC. 2.—*The Committee on Arrangements* shall provide suitable accommodations for the meetings of the Association, including the House of Delegates, Council and of their respective committees, the scientific and commercial exhibits, and shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Secretary of the Association for publication in the program, and shall make additional announcements during the session as occasion may require. The arrangements for and the character of any and all commercial exhibits must meet with the approval of the President and Secretary of the Association.

SEC. 3.—*The Committee on Scientific Work* shall consist of three members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Association for each session, subject to the instructions of the House of Delegates. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions, and other business shall be presented. Such program and all announcements concerning the Annual Session shall be published in the number of THE JOURNAL of the Association that is issued just prior to the Annual Session.

SEC. 4.—*The Committee on Medical Defense* shall consist of three members elected by the House of Delegates, those first chosen being elected for terms of one, two and three years, respectively, and thereafter one member to be elected yearly to serve for three years. This committee shall have full authority governing all matters pertaining to the medical defense features of this Association, and shall be governed by the rules and regulations provided for in the By-Laws of this Constitution.

SEC. 5.—*The Committee on Public Policy and Legislation* shall consist of three members, and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local, state and national affairs and elections.

SEC. 6.—*The Committee on Industrial and Civic Relationship* shall consist of five members appointed annually by the newly elected President. The duties of the committee shall be: To study, gather facts and become intimately acquainted with all and every movement wherever and by whomsoever agitated, proposed or attempted to enact or be enacted, that has as its secret or avowed object the providing of social, commercial or industrial medical insurance for the public, civic or commercial employees of persons; or for the providing of medical or surgical care to a group or groups of individuals singly or collectively. To devise and advise, whenever necessary, intelligent action

on the part of this Association upon these questions. To represent this Association at any and all conferences such as civic or commercial propagandists may hold and by which dignified recognition is extended to the medical profession. To report annually and in writing, its findings, recommendations and information to the House of Delegates. Should occasion arise in the interval between the stated meetings of the House of Delegates and prompt action become imperative, the committee is to present its findings to the chairman of the Council and President who are empowered how to proceed in such emergencies by this Constitution and By-Laws.

SEC. 7.—*The Committee on Medical Education* shall consist of three members appointed by the President, one for one year, one for two years, and one for three years. Thereafter, one member to be appointed each year. The duties of this committee shall be to cooperate with the authorities of the Indiana University School of Medicine and the State Board of Medical Registration and Examination in efforts to improve the educational standards of the state as they pertain to the practice of medicine; to act in conjunction with the members of the Council in providing postgraduate clinics or teaching for the various councilor medical districts of the state; and to select one of its own members as a delegate to the yearly Conference on Medical Education of the American Medical Association.

CHAPTER IX.—COUNTY SOCIETIES

SECTION 1.—All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles or organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Association.

SEC. 2.—As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

SEC. 3.—Charters shall be issued only upon approval of the Council and shall be signed by the President and Secretary of this Association. The Council shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4.—Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Councilor for the district if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

SEC. 5.—Each county society shall be judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the county to become a member.

SEC. 6.—Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

SEC. 7.—In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8.—When a member in good standing in a component society moves to another county in this state, his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 9.—A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he resides.

SEC. 10.—Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

SEC. 11.—At some regular meeting, in advance of the Annual Session of this Association, each county society shall elect a delegate or delegates and alternates to represent it in the House of Delegates of this Association, and the Secretary of the society shall send a list of such delegates and alternates to the Secretary of this Association at least thirty days before the Annual Session. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the Secretary and President of the County Society, be presented to the Committee on Credentials at the time of the Annual Session.

SEC. 12.—The Secretary of each component society shall keep a roster of all its members and of the nonaffiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

SEC. 13.—The fiscal year of the Association shall be from January 1 to December 31, and all assessments shall be for the fiscal year and payable in advance. The Secretary of each component society shall forward the assessment for his society, together with the roster of officers and members and list of nonaffiliated physicians of the county, to the Secretary of this Association, on or before January 1 of each year, and he shall promptly report thereafter the names of any new members elected to membership in his society, and promptly forward to the Secretary of this Association the assessment for such new members. The assessment shall be the same for all members and entitle

the members to all the benefits, including the publications of this Association, from the time of paying the assessment to the close of the fiscal year only.

SEC. 14.—Any county society which fails to pay its assessment or make the report required by February 1 of each year shall be held suspended, and none of its members or delegates shall be permitted to receive any of the publications of the Association or participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

CHAPTER X.—MISCELLANEOUS

SECTION 1.—No address or paper before the Association, except those of the President and orators, shall occupy more than twenty minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any subject, except by unanimous consent, except the first discussant, who shall be allowed ten minutes.

SEC. 2.—All papers read before the Association or any of the Sections shall become its property and shall not be published in any but the official publications of this Association except by consent of the officers and the Editor of THE JOURNAL of this Association. Each paper shall be deposited with the Secretary when read.

SEC. 3.—The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and By-Laws.

SEC. 4.—The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XI.—MEDICAL DEFENSE

SECTION 1.—Seventy-five cents out of the annual dues of each member of the Association shall be set aside as a special fund for Medical Defense.

SEC. 2.—Whenever such fund shall exceed the sum of \$6,000 the surplus over and above this amount shall be turned back into the general treasury or may be used for such other purposes as the House of Delegates may direct.

SEC. 3.—The administration of Medical Defense of this Association shall be intrusted to a permanent committee of three members to be elected by the House of Delegates; those first chosen to be elected for terms of one, two and three years, respectively, and thereafter one member to be elected yearly to serve for three years.

SEC. 4.—This committee shall have full authority governing all matters pertaining to the Medical Defense features of this Association; with power to employ counsel, summon and employ expert witnesses and incur such other expenses as in the judgment of the committee may be necessary in the defense of members against whom suits may be brought; provided, always, that the total expenditure in any single suit shall not exceed 25 per cent. of the fund available at the time suit is incurred.

SEC. 5.—The Treasurer of the Indiana State Medical Association shall be custodian of the Defense Fund, separately kept, and shall give an additional bond in the sum of \$6,000.

SEC. 6.—The Medical Defense Committee shall make an annual report to the House of Delegates of the cases in which it has been of service to members, and furnish an account of the money received and expended, such report to be published in *THE JOURNAL* of the Indiana State Medical Association at the time and in the manner that reports of other committees of the Association are published. The financial report of the committee shall be submitted to and approved by the Council.

SEC. 7.—The liability of this Association shall include only the expenses necessary for the legal defense of its members and not damages awarded.

SEC. 8.—The Association shall not undertake the defense of a member in a suit that may be brought to secure indemnity for services rendered prior to Jan. 1, 1912, nor in any case in which the member, who applies for medical defense by the Association, has failed to pay his annual dues for 1912 prior to the rendering of services which are the basis of the suit; and that medical defense by the Association shall not be available to those who are delinquent, or to those who have not paid the annual dues of the Association prior to the rendering of services for which indemnity is asked. (Dues are payable on January 1, and become delinquent on February 1 of each year.) The membership card of this Association, duly signed and dated by the Secretary, shall be considered the only bona fide evidence of payment of dues or membership in this Association.

SEC. 9.—A member desiring to avail himself of the services of the Committee on Medical Defense in connection with litigation brought or threatened must first submit to a local committee of his county medical society—to be composed of the President, Secretary and one other member in good standing who may be nominated by the defendant—a full statement of the question at issue, including the diagnosis and treatment of the case and the names of physicians, nurses and other persons having knowledge of the same, who may be summoned as witnesses.

SEC. 10.—The committee of the county medical society shall immediately, after an investigation of all the circumstances and facts, transmit its report, with recommendations, to the Committee on Medical Defense of this Association.

SEC. 11.—Accompanying such report from the county society, if favoring medical defense by the Association, there must also be furnished the written authority of the defendant granting to the Medical Defense Committee of this Association full power to act in his behalf, and an agreement that his case shall not be compromised or settled without the consent of a majority of the Committee on Medical Defense.

SEC. 12.—In the event that the county committee shall fail to recommend the case as one worthy of the recognition of this Association, a direct appeal may be made to the Committee on Medical Defense of this Association, whose decision shall be final.

SEC. 13.—Suits brought against the estate of a deceased member shall be defended as if that member were alive; provided, that such member was in good standing in the Association at the time of his death and that services for which indemnity is asked were rendered while the deceased was a member in good standing.

SEC. 14.—Each member of the Committee on Medical Defense of this Association shall be entitled to an honorarium of \$10 per diem for services actually rendered while at home, and \$30 per diem with traveling expenses, if required to go out of town in the investigation of any case or in attendance at court, and these same fees shall be allowed to expert witnesses under similar circumstances.

SEC. 15.—The Committee on Medical Defense shall have power to adopt such other rules, not in conflict with the foregoing, as in their judgment may seem necessary.

CHAPTER XII.—DIVISION OF FEES

This Association does not countenance or tolerate fee-splitting, division of fees, or commission paying directly or indirectly, and any member found guilty shall be expelled from membership.

CHAPTER XIII.—AMENDMENTS

These By-Laws may be amended at any Annual Session by a majority vote of all the delegates present at that session, after the amendment has lain on the table for one day.

INDIANAPOLIS MEDICAL SOCIETY

May 4

The May 4 meeting was called to order by the president, Dr. James H. Taylor. The minutes of the previous meeting were read and approved. The applications of Drs. Norman R. Byers and Lacey L. Shuler were read for the first time.

Program: Three case reports, Dr. William F. Cleveland.

1. Metastatic Abscess of Arm following Streptococcus Pyogenes Infection of Mastoid. Woman of 42, with an otitis media which has been relieved by paracentesis. Four days later mastoiditis developed which same was substantiated by roentgen ray. Four days after mastoidectomy had a chill and temperature rising to 104. No clinical findings. Three days later a small red spot developed on arm. Diagnosed as osteomyelitis and operated by Dr. Clark. No bone findings, but bacteriologic examination showed streptococcus pyogenes infection.

2. Lateral Sinus Infection and Thrombosis Streptococcus Hemolyticus. A case with double otorrhea. External canal was douched. Temperature rose to 105 and both mastoids were tender. Operated and mastoid found full of pus. Temperature again rose to 106, axillary. Unusual leukocyte count of 13,000. Lateral sinus opened and drained. Temperature fell and remained down for nine days. At that time swelling arose over left jugular. Resection of internal jugular by Dr. Noble and myself was followed by recovery.

3. Acute Staphylococcc Osteomyelitis of Femur following Furunculosis of External Auditory Canal. A girl of about 12 years with two furuncles in external auditory canal and with elevated temperature. Incision with drainage but temperature continued and a red spot appeared over left femur. Diagnosed as osteomyelitis by Dr. J. A. MacDonald and operated by Dr. Ross the same evening. A very virulent infection found. Slow improvement followed but a second operation was necessary five months later when some pieces of bone were removed. At the present there is still a small amount of drainage.

Case Report: Two Cases of Foreign Body in the Urinary Tract, Dr. A. F. Weyerbacher.

1. Mr. M. L. passed a glass headed pin into urethra a distance of about 2.5 inches. Unable to remove pin. Removed to hospital and under local anesthesia endoscopic examination showed point of pin imbedded in floor of urethra. Endoscope removed and pressure made against pin head forcing point through floor of urethra and pulling shaft of pin through as far as possible. Head of pin then directed toward meatus and forced upward by telescoping the penis on the pin. Pin then grasped and removed. Hot boric irrigations for two days followed by good recovery and no after-effects.

2. Mrs. S. Y., complaining of pain in left hip radiating across abdomen. Denies venereal diseases. Family physician gives history of attempted abortion two months ago by means of a wooden probe. Been in bed most of the time since. Exploratory laparotomy done for possible obstruction but none found. Ten days later anterior vaginal fornix was aspirated and small amount of thick pus withdrawn. Patient had had a severe cystitis with great amount of pus since entering hospital. Cystoscopic examination showed a much inflamed bladder and a small ulcerated area low down. Treatment was directed more to cystitis. Two months later a cystoscopic examination by Dr. Garshwiler revealed an object 5 by 3 cm. lying transversely in bladder. Could not be removed through the operating cystoscope. Finger inserted as a guide and object grasped with Kelley clamp. Piece of slippery elm bark removed through urethra after small amount of ChCl_3 had been given. Discharged a month later.

These cases are reported on account of relief without external urethrotomy in the first case and delivery of foreign body with Kelly clamp in the second.

Case Reports: Bone Conditions as Found in the Army, Dr. E. B. Mumford and Dr. R. O. Beeler.

About fifty plates were exhibited showing various bone injuries resulting from army service and the ultimate results following treatment.

DISCUSSION

Dr. F. C. Walker: It is exceedingly interesting to hear about some of the end results of army surgery. Our instructions were to remove everything and sometimes it seemed contraindicated.

Dr. D. W. Layman: Congratulated Dr. Clevenger on his sinus work. Is of the opinion, however, that if sinus is opened jugular should be resected because infection of jugular is almost sure to follow. Mentioned two cases of sinus involvement with jugular resection following measles.

Dr. David Ross: We must recognize the possibility of osteomyelitis coming from distant infections. It is always emergency surgery. Very glad to see Dr. Mumford's plates. Bone work is very important. Plating often does much harm.

Dr. J. W. Carmack: Dr. Clevenger's reports carry a lesson, namely, early diagnosis and operation. Bacteriology on great many cases not carried out. *Streptococcus hemolyticus* is very destructive and must be closely watched. Early ligation should be done in sinus thrombosis.

Meeting adjourned. Attendance 80.

May 11

Meeting called to order by the president, Dr. James H. Taylor. Drs. Norman Byers and Lacey L. Shuler were elected to membership in the society. A com-

munication from the Centennial Committee was read asking participation on the part of the medical society. It was moved and seconded that a committee be appointed to report at the next meeting. Motion carried.

Drs. Spath, Henry, Willis, Kime and Marshall appointed.

Program: Paper, "Laryngeal Tuberculosis," Dr. C. H. McCaskey. No abstract submitted.

Paper, "Protein Poisoning," Dr. H. R. Alburger. No abstract submitted.

DISCUSSION

Dr. C. J. McIntyre: Men especially interested in tuberculosis have long been agreed that the laryngeal phase is secondary. Practically all lesions outside of lung are accompanied by tuberculosis of the lung. Incidence in males twice that in females. Diagnosis depends on laryngoscope. Must see condition to diagnose. Loss of voice, huskiness and difficulty in swallowing are suspicious symptoms but may be found in other conditions. Elevated areas on vocal cords may simulate tuberculous conditions but in fact be mucous vesicles. Laryngeal tuberculosis shows disposition to spontaneous recovery. As pulmonary condition improves larynx clears. Rest, not only of vocal cords but absolute rest in bed, is essential to improvement. Local applications generally useless and may be harmful.

Dr. William S. Tomlin: Laryngeal tuberculosis of considerable interest. In general practice noticed frequency of laryngeal involvement in pulmonary cases. These patients should be advised against pregnancy as they usually die before delivery. A great deal can be done in way of treatment. Old tuberculin applied to ulcerations gave improvement. Pain due to deglutition. Most painful lesion on epiglottis. May be excised and cauterized.

Dr. William H. Foreman: The superior laryngeal nerve is the sensory nerve of the larynx. Discussed the interrelationship of the nerve supply of throat, lungs and stomach.

Dr. Goethe Link: Mentioned the relief of pain following excision of the nerve. Described technic of operation.

Dr. Tooles: Thinks he was the first to use the pollen or rag weed for hay-fever. Described the sensitization of various patients by various proteins. Sensitization depends on the permeability of the tissues.

Dr. E. DeW. Wales: Reported ten cases of laryngeal tuberculosis, eight of which lived after use of roentgen ray.

Dr. R. C. Beeler: Most literature on the treatment of laryngeal tuberculosis is French. None of the French radiologists believe in roentgen-ray treatments. Dr. Beeler doubts its advisability as treatment. Does no good and may do harm. Profound toxemia may be produced by deep dosage of roentgen ray, probably due to protein absorption.

Dr. E. A. Willis: Spoke of severe pain as being almost pathognomonic of laryngeal tuberculosis. Thought roentgen ray would control pain.

Dr. Ralph Chappell: Emphasized importance of prophylaxis. Accomplished this by taking care of growths in upper air passages.

Dr. Alfred Henry: Spoke against use of roentgen ray. Local use of tuberculin may be harmful since too much may be absorbed, producing dangerous con-

sequences. Tuberculin should be given subcutaneously. Rest is the treatment par excellence.

Meeting adjourned. Attendance 50.

May 18

Meeting was called to order by the president, Dr. James H. Taylor. There was no business.

Program: Paper, "Cerebrospinal Syphilis," Dr. Charles D. Humes.

Paper, "Effusions Into the Pleural Cavities," Dr. C. C. Campbell.

DISCUSSION

Dr. F. A. Morrison: Any sudden paralysis of external muscles points to syphilis. Recurrent paralysis of the third nerve is pathognomonic of syphilis. During treatment of syphilis of cornea one will clear up and the other become affected. Dizziness is result of muscle deviating and then coming back into proper alignment. Dizziness disappears during sleep or when walking backward. Patient cannot judge distances. A fixed, dilated pupil or unequal pupils are suspicious. Sluggish accommodation also present. General blurring of vision suggestive. Have contraction in field of all colors alike. Hallucination of close eyelids.

Dr. F. C. Neu: The frequency with which nervous diseases are due to syphilis makes this an important subject. Early symptoms of syphilis are not seen in the eye grounds. A few years ago ocular paralysis was considered diagnostic but not now, because other conditions may produce this symptom. Positive Wassermann does not necessarily mean syphilis nor does a negative exclude the disease. Treatment is varied. Each physician must judge the kind of treatment needed. Wassermann is not a guide in determining the course of disease under treatment. Antisyphilitic treatment should be used with great care in presence of renal disease.

Dr. O. B. Norman: Seventy-five per cent. of pleural effusions are comparatively easy to diagnose. The lower margins of chest should be observed.

Dr. H. S. Hatch: A great many cases of effusion are puzzling. Advocates free use of needle for diagnostic purposes.

Dr. C. R. Sowders: Physicians err in not finding fluid in chest early. Daily auscultation in chest diseases is imperative. Beginning pleurisy has been mistaken for appendicitis and laparotomy done. Ought not to depend on roentgen ray for diagnosis of fluid in chest cavity.

Dr. H. R. Alburger: Pointed out great difficulty of diagnosing pleurisy with effusion, empyema and similar conditions. Blood count and temperature chart of great value. Roentgen ray should always be used. Aspirating needle also of much value.

Dr. T. B. Noble, Jr.: In army hospital service every case of pneumonia, wet or dry pleurisy, was aspirated. Skin was anesthetized and incised after which trocar was inserted. Has never seen a case that was injured by use of needle.

Dr. Thomas B. Noble, Sr.: Does not understand why it should be so serious to enter chest with needle where tuberculosis is suspected, since opening up and handling tuberculous conditions of abdomen produce cures.

Dr. Bernhard Erdman: Emphasized the necessity of treating the patient and not the disease in syphilitic conditions. Cerebrospinal syphilis is being found earlier than formerly.

Dr. William A. McBride: Spoke of the large number of apparently healed tuberculosis which were fired up by puncture.

Dr. L. D. Carter: Pessimistic regarding successful treatment of cerebrospinal syphilis.

Meeting adjourned. Attendance 75.

May 25

Meeting was called to order by the president, Dr. James H. Taylor. The reading of the minutes was dispensed with. The applications of Drs. E. L. Lingenman, C. E. Cox and Thomas B. Johnson were read for the first time. The applications of Drs. B. M. Gundelfinger and R. A. Solomon were read the second time and referred to the Council. In accord with a request of the City Board of Health the president appointed Drs. J. R. Eastman, T. Victor Keene and John Sluss as a committee to meet with the board of health Tuesday, June 1, at 8 p. m., to discuss plans for a nurses' home at the City Hospital. Dr. Carl B. Sputh, chairman of the committee on the centennial parade, gave a report, mentioning several plans for representing the advance in medicine. It was moved and seconded that an amount not to exceed \$50 be appropriated for a float. Dr. Keene moved to amend the motion by adding "that nothing in the float be of a morbid, grewsome or repulsive nature." Amendment passed. Motion as amended passed. Dr. Schweitzer announced the annual meeting of health officers on June 2 and 3.

Program: Paper, "Hay Fever," Dr. Ralph S. Chappell. No abstract given.

Dr. T. C. Kennedy, having suddenly become ill, was unable to present his paper on "Radium in Gynecology."

DISCUSSION

Dr. J. F. Barnhill: Dr. Chappell's paper was quite extensive and very interesting. Bosworth was the man who originally claimed nasal conditions were responsible for hay fever. Later the neurologic factor was considered most important and finally outside influences as pollens. All theories have been more or less disproven. Generally, however, a pathologic nasal condition is at least half responsible. As to nasal areas the ethmoid cells are strongest predisposing factor to hay fever. Ethmoiditis is a very common condition and, therefore, there is a great deal of hay fever. This is an anaphylactic disease. Pollen produces ethmoiditis and in turn hay fever. Coolidge of Boston has isolated about fifty-three different proteins causing hay fever. There is no reason why any one pollen should cure a hay fever caused by several different pollens. The serum or pollen preparation should be made in the immediate vicinity of the place where the disease is contracted. In this way the same pollens will be used in treatment.

Dr. Robert Millikan: One result of hay fever is asthma which latter generally lasts through the winter. In control of dosage the cutaneous tests are used with each concentration and the strongest concentration not causing a skin reaction is used in treatment. Wishes to warn against the mixed pollen preparations on the market. Not only unscientific but perhaps dangerous.

Dr. D. O. Kearby: Mentioned report from Mayo's of over 800 cases of which over 500 were negative, 100 doubtful and 200 positive skin reaction. Fruits have very little to do with asthma. Undoubtedly, a hypersusceptibility to some protein. Cautioning of

nerve endings formerly widely used. The pollen theory is worth while and should be worked out very carefully.

Dr. C. H. McCaskey: Several things enter into the etiology of hay fever. Pollens are of course factors as are also nasal pathology and family history. This subject is open to a great deal of discussion and work as to the definite cause of the condition.

Dr. F. W. Cregor: Different skins react differently to the same stimuli. Blond, thin skinned individual will respond more markedly than the brunette. Great discretion must be exercised in interpreting negative or positive reactions.

Dr. Amos Carter, Rockville, Ind.: Expressed his pleasure in being present at the meeting and extended an invitation to the members of the society to pay a visit to the sanitarium at Rockville.

Dr. Ralph S. Chappell, closing: Pollen therapy presents most relief and cures in hay fever up to date. In treating cases pollen from this vicinity is used. Any bad effects last only one to two hours.

The society thereupon adjourned until October.

Attendance 78.

L. H. MAXWELL, Secretary.

MONTGOMERY COUNTY

The Montgomery County Medical Society met June 16, at the Crawford House, Crawfordsville. Society was called to order by the president, Dr. W. F. Batman.

Routine business was dispensed with and Dr. George Hall of Chicago was introduced. Dr. Hall gave a learned and instructive lecture on "Encephalitis Lethargica."

Abstract: The micro-organism described by Loewe and Strauss of New York is probable cause of the disease. Disease is most common in males. Petechial hemorrhages are found in medulla, and pons and may include brain cortex. The pathologic process affects all the vital organs due to involvement of cranial nerves. Onset may be sudden with diplopia as most common symptom. Leukocyte count not of much importance in making diagnosis. Normal cell count of spinal fluid is 8 or 9 to 1 c.c. In this disease it is 80 or 90 to 1 c.c. Collar of leukocytes around blood vessels due to perivascular hemorrhage. Disease is to be differentiated from syphilis, poleomyelitis, tubercular meningitis, botulism, brain tumor and serous meningitis. Treatment, mostly symptomatic. May remove some spinal fluid in selected cases. Mortality, 35 per cent. Some of the late manifestations are tremor, mental defects, and athetoid movements.

After the lecture twenty doctors partook of a bountiful dinner served by the Crawford House.

After dinner speeches were delivered by the Hon. Charles McCabe and Dr. Williamson.

Adjourned.

A. L. LOOP, Secretary.

SEVENTH DISTRICT

The annual meeting of the Seventh District Medical Society was held at the Indianapolis City Hospital, July 14, 1920.

Dr. S. E. Earp, president, delivered an address on "Some Causes of the Unrest in Medicine." Other papers were read by Dr. E. F. Kiser, on "Goiter"; Dr. Jewett Reed, "Surgical Diagnosis," and Elmer Funkhouser, "Abdominal Visceral Tuberculosis."

The evening session was held at the Independent Athletic Club following a chicken dinner. Dr. F. B. Wynn read a paper relating to postinfluenzal pulmonary complications.

The papers were discussed by Drs. Craig of Greenwood, Jones of Clayton and Hadley and Sowder of Indianapolis.

The next meeting will be held at Greenwood. Dr. S. E. Earp was elected councilor for the next four years, and the officers for the next year are Dr. E. F. Kiser, Indianapolis, president, and Dr. Bernard Larkin, Indianapolis, secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1920, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

POLLEN ANTIGEN-LEDERLE (FALL TYPE).—A liquid obtained by extracting equal parts of the pollen of ragweed, goldenrod, wormwood and maize. Each cubic centimeter contains 14,000 pollen units (a pollen unit is the equivalent of 0.001 mg. of pollen). This liquid is made into fifteen different dilutions. The product is supplied in packages containing the fifteen dilutions (to be used for prophylactic treatment), in boxes containing five of the dilutions (series A, B and C, respectively), and in packages containing a single tube (for diagnostic use). Lederle Antitoxin Laboratories, New York.

WHOLE OVARY-H. W. D.—The ovarian gland of the cow, including the corpora lutea, freed from extraneous matter and dried in vacuo. For actions and uses, see general article on Ovary (New and Nonofficial Remedies, 1920, p. 201). Whole Ovary-H. W. D. is sold in the form of 5 grain tablets only. Hynson, Westcott & Dunning, Baltimore.

BENZYL BENZOATE-ABBOTT.—A brand of benzyl benzoate (see New and Nonofficial Remedies, 1920, p. 49) complying with the N. N. R. standards. It is also supplied in the form of Elixir Benzyl Benzoate-Abbott and Benzyl Benzoate Tablets-Abbott 3 grains. Abbott Laboratories, Chicago.

BENZYL BENZOATE-FRITZSCHE.—A brand of benzyl benzoate (see New and Nonofficial Remedies, 1920, p. 49) complying with the N. N. R. standards. Fritzsche Brothers, Inc., New York.

BENZYL BENZOATE-MERCK.—A brand of benzyl benzoate (see New and Nonofficial Remedies, 1920, p. 49) complying with the N. N. R. standards. Merck & Co., New York.

BENZYL BENZOATE-ORGANIC SALT & ACID CO.—A brand of benzyl benzoate (see New and Nonofficial Remedies, 1920, p. 49) complying with the N. N. R. standards. Organic Salt & Acid Co., New York.

AMPULES VEN-IRON CACODYLATE.—Each ampule contains 0.03 gm. ($\frac{1}{2}$ grain) of ferric cacodylate (see New and Nonofficial Remedies, 1920, p. 44). Intra Products Co., Denver, Colo.

AMPULES VEN-IRON CACODYLATE.—Each ampule contains 0.03 gm. ($\frac{1}{2}$ grain) of ferric cacodylate (see New and Nonofficial Remedies, 1920, p. 44) in physiological solution of sodium chloride. Intra Products Co., Denver, Colo. (*Jour. A. M. A.*, July 3, 1920, p. 35).

DIPHTHERIA TOXIN-ANTITOXIN MIXTURE (GILLILAND).—Each cubic centimeter of diphtheria toxin-antitoxin mixture (see New and Nonofficial Remedies, 1920, p. 264) represents three lethal doses of toxin and approximately 3.2 units of antitoxin. Marketed in packages representing one immunizing treatment, and in packages containing ten treatments. Gilliland Laboratories, Inc., Ambler, Pa.

GONOCOCCUS GLYCEROL-VACCINE (LEDERLE).—A suspension of killed gonococci in a vehicle of glycerol and physiological solution of sodium chloride. For a discussion of gonococcus vaccine, see New and Nonofficial Remedies, 1920, p. 283. Marketed in packages of fifteen vials containing progressive amounts of the vaccine (*Jour. A. M. A.*, July 17, 1920, p. 177).

PROPAGANDA FOR REFORM

ACRIFLAVINE G H AND PROFLAVINE G H.—Acriflavine and proflavine have been admitted to New and Nonofficial Remedies. However, the products sold by the Heyl Laboratories as "Acriflavine G H" and "Proflavine G H" have not been accepted for New and Nonofficial Remedies because (1) their quality did not conform to the Council's standards and (2) in the advertising issued for these drugs the manufacturer failed to give the unfavorable as well as the favorable clinical reports that have been published (*Jour. A. M. A.*, July 3, 1920, p. 51).

ANTIDOTE FOR SNAKE POISON.—No Anti-Venom for snake poison has been accepted for New and Nonofficial Remedies. Experiments looking toward the production of anti-venom for snake poisoning seem to have met with some success, but the use of these products in therapy is still in the experimental stage. In general it has been shown that an anti-venom prepared for one species is not always effective when used against the venom of another species (*Jour. A. M. A.*, July 3, 1920, p. 51).

PRODUCTS OF THE AMERICAN ORGANO THERAPY CO.—Dr. Alfred A. Lowenthal has announced a "Post Graduate Course of Lectures and Clinics" to the physicians of Chicago, Denver, St. Louis, Columbus, etc., and incidentally brings to the attention of the medical world the alleged virtues of the products of the American Organotherapy Company. A few years ago, the American Animal Therapy Company of Chicago put out such products as Lymphoid Compound (Lowenthal), Ova Mammoid (Lowenthal) and Prostoid (Lowenthal), and these products were exploited to the public (*Jour. A. M. A.*, July 3, 1920, p. 49).

ECHITONE AND ECHINACEA.—A circular entitled "Skin Lesions of Unknown and Uncertain Origin" sent out by Strong, Cobb & Co. is devoted to the exploitation of "Echitone," stated to contain echinacea, blue flag and pansy. Several years ago, the Council on Pharmacy and Chemistry examined "Echitone" and rejected the product because unwarranted therapeutic claims were made for it and for other reasons. The drug echinacea has been claimed to be a "specific" for rattlesnake bites, syphilis, typhoid, malaria, diphtheria and hydrophobia. It has also been credited by enthusiasts with curative effect in tuberculosis, tetanus and exophthalmic goiter, and with the power of retarding the development of cancer. The Council on Pharmacy and Chemistry examined the claims made for this drug and reported that there was no reliable evidence in substantiation of the claims made for it. Echinacea is one of the many vegetable drugs introduced by the eclectics without a rational basis for their use (*Jour. A. M. A.*, July 17, 1920, p. 193).

NA VERSUS K.—Advantages of sodium over potassium salts: (1) *Rational therapeutics.* Sodium compounds are as efficient as, in many instances better than, the corresponding potassium compounds. Potas-

sium is more toxic. (2) *National aid.* Accustom yourself to use sodium, an abundant natural product of the United States. The home of potassium is Germany, which, to its own commercial gain, popularized potassium drugs. (3) *Price.* Sodium salts are cheaper. Potassium is, relatively speaking, a foreign substance in the body. Potassium and sodium salts are prescribed mainly for the effects of the radicle they carry. It is illogical, therefore, to administer potassium acetate or potassium bromid when sodium acetate or sodium bromid can more readily be given. In spite of the smaller demand, sodium salts are on the whole cheaper than potassium salts and, should the medical profession prescribe the sodium more generally, all of those that might be used in medicine would be less expensive than the corresponding potassium salt (*Jour. A. M. A.*, July 17, 1920, p. 192).

BORACETINE.—Boracetine (F. E. Barr & Co., Chicago) in 1918 was heralded as "The Guardian of Health." It was claimed to be "an all-around antiseptic, especially good for pyorrhea, sore gums, sore throat, etc., excellent for cuts, bruises, insect bites, skin eruptions and, in fact, any condition when an efficient healing agent and germ destroyer is needed." It was also recommended to "get rid of that 'dark brown taste'." Indirectly Boracetine was also claimed to be a preventative of consumption, scarlet fever, diphtheria, etc. From the analysis made in the A. M. A. Chemical Laboratory it appears that Boracetine is nothing more wonderful than *Liquor Antisepticus*, N. F. with a dash of formaldehyd. The more "patent medicines" are analyzed the more obvious becomes the commercial wisdom of the nostrum interests in fighting formula disclosure. Secrecy and mystery are the "back bone" of the "patent medicine" industry (*Jour. A. M. A.*, July 17, 1920, p. 192).

CHAULMOOGRA OIL IN LEPROSY.—The results obtained with the treatment of lepers at the leprosy investigation station in Kalihi, Hawaii, with the ethyl esters from chaulmoogra oil have been encouraging. It will require, however, some time to determine whether a real cure for leprosy has been discovered (*Jour. A. M. A.*, July 24, 1920, p. 263).

CHEMOTHERAPY OF TUBERCULOSIS AND THE "CERIUM SALT TREATMENT."—Koch studied the effects of many chemical substances, including a gold cyanid compound, on the growth of the tubercle bacillus in cultures, and concluded that all these substances remained completely inactive when tested upon the tuberculous animal. Compounds related to guaiacol and creosote came to have a widespread reputation as tuberculocidal agents without any one's taking the trouble to ascertain definitely whether they really had any particular capacity to injure tubercle bacilli in the test tube, the tuberculous animal or the consumptive patient, although the German manufacturing chemists provided innumerable proprietary derivatives of these drugs. Some time before the war, a "complex lecithin-copper compound" of unannounced composition was put forward in Germany. Another copper cure came from Tokyo, "cyanocuprol" of Koga. Other copper compounds, such as copper arsenphenamin, also were brought out. But none of these copper compounds have settled the tuberculosis problem. Recently newspapers have given publicity to the treatment of tuberculosis by the so-called cerium earth salts in France. It appears that a few observations have been made on the inhibitory action on the growth of tubercle bacilli of salts of cerium and some other rare earth metals. The inhibitory action was less than that observed in the past for the chemical substances, and there is no record of past experiments to determine their effect on experimental tuberculosis. Possible cerium earth salts help the tuberculosis; the evidence so far presented, however, is nothing to get excited about (*Jour. A. M. A.*, July 24, 1920, p. 246).

MORE MISBRANDED DRUG PRODUCTS AND NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities under the Food and Drugs Act: Seelye's Wasa-Tusa, Dr. Seelye's Compound Extract of Sarsaparilla, Seelye's Laxa-Tena, Seelye's Cough and La Grippe Remedy and Seelye's Fluorilla Compound (A. B. Seelye Medical Company) were misbranded because the therapeutic claims were unwarranted. Aspirin Tablets (Verandah Chemical Company) were misbranded because they contained no acetylsalicylic acid (aspirin). Dr. Grove's Anodyne for Infants (Smith, Klein & French Company) was misbranded because the therapeutic claims were unwarranted and because the carton failed to contain a statement of the quantity and proportion of morphin and alcohol contained therein. Cacapon Healing Water (Capon Springs Company) was adulterated in that it consisted in part of a filthy, decomposed and putrid animal and vegetable substance and misbranded because the curative claims were unwarranted. Seawright Water (Seawright Magnesians Lithia Spring Company) was adulterated in that it consisted in part of a filthy and decomposed vegetable substance (*Jour. A. M. A.*, July 24, 1920, p. 261).

BENZYL BENZOATE.—The chemical properties of benzyl benzoate have been known for years. Its therapeutic properties as an antispasmodic have been known only a short time. Before this new addition to our materia medica can be given thorough clinical trial, it is necessary that the products be of a quality sufficiently pure for medicinal use. For the physician's protection, as well as for an aid to the manufacturer, the A. M. A. Chemical Laboratory, at the request of the Council on Pharmacy and Chemistry, has elaborated purity standards. It has also examined the market supply and found that, on the whole, the non-proprietary medicinal brands are of a satisfactory grade for clinical use (*Jour. A. M. A.*, July 31, 1920, p. 335).

A SHOTGUN MIXTURE.—It is stated that the following prescription is used with success in "intestinal cases of a medical type": zinc sulphocarbolate, 0.5; bismuth subnitrate, 15.0; bismuth betanaphtholate, 8.0; camphorated tincture of opium, 15.0; syrup of acacia, 30.0; elixir lactopeptine, to make 130.0. In this the chief active ingredients are bismuth subnitrate and camphorated tincture of opium. The zinc sulphocarbolate is superfluous. The action of the bismuth betanaphtholate probably does not differ from that of bismuth subnitrate, and cinnamon water or simple elixir might as well be substituted for elixir lactopeptine. (*Jour. A. M. A.*, July 31, 1920, p. 335).

BOOK REVIEWS

POPE'S MANUAL OF NURSING PROCEDURE. By Amy E. Pope, formerly Instructor in the School of Nursing, Presbyterian Hospital, New York; Visiting Instructor, San Francisco. Cloth, \$2.40. C. P. Putnam's Sons.

The author of this book is a well known teacher and is credited with a number of textbooks for nurses. This Manual of Nursing Procedure is prepared more especially to facilitate teaching by a demonstration of everything which a nurse is expected to do from bed making to catheterization of the bladder, and the subjects are discussed in a manner that leaves no room for misunderstanding. In fact, all of the most approved rules of procedure for nursing in all its phases are discussed. There are no references to bacteriology, dietetics, and so forth, as the author has other books touching on those subjects.

PATHOGENIC MICRO-ORGANISMS. By William Hallock Park, M.D., Professor of Bacteriology and Hygiene, University and Bellevue Hospital Medical College, and Director of the Bureau of Laboratories of the Department of Health, New York City; and Anna Wessels Williams, M.D., Assistant Director of the Bureau of Laboratories of the Department of Health; Consulting Pathologist to the New York Infirmary for Women and Children. Seventh edition, enlarged and thoroughly revised, with 214 engravings and 9 full-page plates. Cloth, \$6. Philadelphia and New York: Lea and Febiger.

This book really represents developments from a rather modest textbook on bacteriology in medicine and surgery, but the bare fact that seven editions, each an improvement on the preceding one, have been exhausted is sufficient evidence that the work of the authors has been appreciated. Furthermore, the position and reputation of the authors is quite sufficient to give the volume a standing that commends it to the medical profession. The book is intended as a practical reference for students, physicians, and health officers and it well deserves commendation, for the subject matter has kept abreast of the times. Like almost every other branch of medical science there have been during and since the Great War many improvements in the methods of studying pathogenic micro-organisms and in applying the knowledge derived through study and experimentation, but this book represents all the recent advances and is a decided improvement over previous editions in that the subject matter has been entirely re-written and much new material added. The information gained during the influenza epidemic on bacteria pathogenic for the respiratory tract, and during the last part of the war with preventive measures against typhoid fever, paratyphoid fevers and wound infections due to anaerobes has been added. There are interesting chapters on the use of animals for diagnostic and test purposes, complement fixation, the practical applications of serum therapy, the bacteriology of milk in its relation to disease, the destruction of bacteria by chemicals, and practical disinfection and sterilization (house, person, instruments and food), in addition to separate chapters on all of the principal pathogenic micro-organisms and the latest and most improved methods used in bacteriologic work. Throughout the text there are numerous illustrations, some in colors. Altogether the work is comprehensive and dependable.

DISEASES OF THE NERVOUS SYSTEM. By Smith Ely Jelliffe, M.D., Ph.D., Formerly Professor of Psychiatry, Fordham University, New York, and Formerly Adjunct Professor of Diseases of the Mind and Nervous System, New York Post-Graduate Medical School and Hospital; and William A. White, M.D., Superintendent of St. Elizabeth's Hospital, Washington, Professor of Nervous and Mental Diseases, Georgetown University; Professor of Nervous and Mental Diseases, George Washington University, and Lecturer of Psychiatry, U. S. Army and Navy Medical Schools. Third edition, revised, re-written and enlarged. Illustrated with 470 engravings and 12 plates. Philadelphia and New York: Lea and Febiger.

Perhaps the most important additions to this third edition of a well known textbook are the chapters on sensorimotor neurology and the interpretation of the various psychoses as brought about through observations and study afforded by the great war. However, the entire book represents a revision of previous

(Continued on *Adv.* p. xciii)



PITUITARY LIQUID

THE product is of standard strength. The package is dated. The doctor knows. He doesn't trust to luck.

It is Posterior Pituitary Active Principle in isotonic salt solution and is without preservatives.

$\frac{1}{2}$ c. c. ampoules (small dose) are labeled, "Obstetrical and Surgical."

1 c. c. ampoules (full dose) are labeled, "Surgical and Obstetrical."

Either in an emergency.

Literature on request

ARMOUR AND COMPANY
CHICAGO

SAVE MONEY ON YOUR **X-RAY** SUPPLIES

Get Our Price List and Discounts on
Quantities Before You Purchase

**HUNDREDS OF DOCTORS FIND WE SAVE
THEM FROM 10% TO 25% ON X-RAY
LABORATORY COSTS**

AMONG THE MANY ARTICLES SOLD ARE

X-RAY PLATES. Three brands in stock for quick shipment. **PARAGON** Brand, for finest work; **UNIVERSEAL** Brand, where price is important.

X-RAY FILMS. Duplitzed or Double Coated—all standard sizes. X-Ograph (metal backed) dental films at new, low prices. Eastman films, fast or slow emulsion.

BARIUM SULPHATE. For stomach work. Finest grade. Low price.

COOLIDGE X-RAY TUBES. 5 Styles. 10 or 30 millamp.—Radiator (small bulb), or broad, medium or fine focus, large bulb. Lead Glass Shields for Radiator type.

DEVELOPING TANKS. 4 or 6 compartments stone, will end your dark room troubles. 5 sizes of Enameled Steel Tanks.

DENTAL FILM MOUNTS. Black or gray cardboard with celluloid window or all celluloid type, one to eleven film openings. Special list and samples on request. Price includes your name and address.

DEVELOPER CHEMICALS. Metol, Hydroquinone, Hypo, etc.

INTENSIFYING SCREENS. Patterson, TE, or celluloid-backed screens. Reduce exposure to one-fourth or less. Double screens for film. All-mental Cassettes.

LEADED GLOVES AND APRONS. (New type glove, lower priced.)

FILING ENVELOPES with printed X-Ray form. (For used plates.) Order direct or through your dealer.



If You Have a Machine Get Your Name on Our
Mailing List

GEO. W. BRADY & CO.
782 So. Western Ave. CHICAGO

SUMMER INTESTINAL DISTURBANCES

For Acute Symptoms:

BENZYL BENZOATE MISCIBLE, H. W. & D.
(20 Per Cent Solution)

Corrects spastic contraction of smooth muscle
viscera. Non-narcotic.

A Prophylactic and to Remove Cause:

BULGARA TABLETS, H. W. & D.

Prevent and correct putrefactive and fermentative conditions of intestines.

Both Products Safe and Convenient

Specimens and Literature Upon Request

HYNISON, WESTCOTT & DUNNING
BALTIMORE

(Continued from page 294)

editions, with the addition of much new material obtained through advance in our knowledge of the subject. Within the past few years the endocrinopathies have come in for extended investigation and the data available is large but has been condensed and recorded in the present volume.

The subject matter has been divided into three parts, the first dealing with the physicochemical systems or the neurology of metabolism under which heading are considered the endocrinopathies. Part second deals with the sensorimotor systems or sensorimotor neurology, under which is discussed the lesions of the spinal cord and brain with an especially good chapter on neurosyphilis. Part third discusses the neuroses, psychoneuroses, and psychoses.

The book is well illustrated and written in a manner which makes it of practical value to the student and practitioner of medicine.

A TREATISE ON CYSTOSCOPY AND URETHROSCOPY. By George Luys, Paris; translated and edited by Abr. L. Wolbarst, New York. Published by C. V. Mosby Company, St. Louis.

The work consists of 386 pages with 217 figures in the text, and 24 chromotypographic plates outside the text, including 76 drawings from original water colors. Sixty-four pages are devoted to the history of the development of cystoscopy and urethroscopy, presenting the various stages of development of the urethroscope and cystoscope. This seems complete from an historic point of view. Forty-nine pages are devoted to urethroscopy. The technic is entered into very thoroughly, and the review of the indications with the

discussion of the interpretations is complete. The author emphasizes direct vision urethroscopy. The discussion of the indications for and methods of catheterization of the ejaculatory ducts is good and worth study by those interested in this method of treating chronic spermatocele. Twenty pages are devoted to this subject. The chapters on cystoscopy are complete and both the advantages and disadvantages of the direct and indirect (prismatic) cystoscopy are presented. The discussion of diseases of the bladder and the review of the subject of meatoscopy are good. Many cases are reviewed in detail illustrating the points made. The author insists on the importance of uterine cancer as a cause of bladder pathology and discusses changes in the bladder as determined at cystoscopy during the development of pregnancy. Much space is devoted to catheterization of the ureters (72 pages) and much valuable data is given. However, his conclusions as to the relative value of the direct vision and prismatic instruments in this particular field is not in accord with the opinions of American urologists. He discusses the treatment of bladder tumors by galvanocauterization at length. He then presents the value of electrocoagulation in the treatment of this condition and follows with a comparative value of the two methods, deciding in favor of the former.

The illustrations are excellent. His discussions are complete. However, his great plea throughout the text is for direct cystoscopy with the type of instrument he has devised and which bears his name. The value of the work is greatly enhanced for American readers by the remarks and discussions made throughout the text by the editor.

“Horlick’s”

THE ORIGINAL

The Preferred
X-RAY
Meal with
Barium Sulphate

Write for
Literature

Is always clean, safe and reliable and protects your infant patients against the uncertainty and risks attending the summer milk supply, which bears such close relation to infant mortality at all times.

Avoid Imitations

Samples prepaid upon request

HORLICK’S MALTED MILK CO.
RACINE, WIS.

The Cascara House

AS introducers of Cascara Sagrada to the medical profession, as students of the therapeutics of the drug for many years, as inventors of new processes in Cascara manufacture, as creators of a world-wide demand for Cascara products, we are justly entitled to the designation of "The Cascara House."

The medicinal value of Cascara Sagrada was unrecognized until we introduced the drug to physicians in 1877. At that time our research work was devoted to the vegetable materia medica. Synthetic chemistry and biological therapy were practically unknown.

Cascara was one of the important discoveries made during this period. For years, with the aid of men eminent in botany, chemistry, pharmacology and therapeutics, we labored to establish the position of Cascara Sagrada as a

medicinal agent, and among other things we directed it to the attention of the British Medical Association at a meeting held in Cork, Ireland, in 1879.

That our original estimate of the drug was not exaggerated has been proved by subsequent history. Cascara Sagrada has maintained its reputation as a tonic laxative, and it has come to be recognized by the Pharmacopœias of all civilized nations.

We were not only pioneers in the introduction of Cascara, but throughout all the years which have since intervened we have devoted time and money and experimentation to the improvement of Cascara preparations. We have studied the subject exhaustively. The fruit of this long investigation is now to be seen in a line of products that are the acknowledged leaders in their field.

Parke, Davis & Company



For Three-Quarters of a Century the Name

SQUIBB

Has Been Accepted as a Guarantee of Purity

Today This Label Is Equally Significant on

Biological Products

Summer Reminders:

TYPHOID VACCINE

(Plain or Combined)

TETANUS ANTITOXIN

(Immunizing or Curative)

THROMBOPLASTIN

(Local or Hypodermic)

BACILLUS BULGARICUS

(Types A and B)

PASTEUR ANTI-RABIC VACCINE SQUIBB (21 Treatments)

Can be given in the home. Initial treatments are constantly in stock and can be ordered by wire from

E. R. Squibb & Sons, 323 W. Lake St., Chicago, Ill.

For the Venereal Campaign:

SOLARGENTUM

PROTARGENTUM

PROPHYLACTIC OINTMENT

E. R. SQUIBB & SONS, NEW YORK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

Biological Laboratories, New Brunswick, N. J.

SOUTH BEND NUMBER

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 9

FORT WAYNE, IND., SEPTEMBER 15, 1920

PER YEAR, \$2.00
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES		PAGE	EDITORIALS		PAGE
Hyperactivity of the Thyroid.	Dr. Miles F. Porter, Jr., Fort Wayne, Ind.	295	Our President.....		327
The Physician: The Young Doctor.	Frank B. Wynn, M.D., Indianapolis	298	Chronic Appendicitis.....		327
THE SOUTH BEND SESSION			Fees in Industrial Cases.....		328
General Announcement		305	Objection to Medical Society Dues.....		328
Condensed Program		314	Editorial Notes.....		329
Official Program—Scientific Program.....		315	MISCELLANEOUS		
Report of Committee on Medical Defense.....		321	Deaths		331
Report of Committee on Medical Education.....		322	News Notes and Personals.....		332
Report of Committee on Industrial and Civic Relations— Report of Committee on Hospital Standardization.....		323	The Truth About Medicines.....		335
Report of Committee on Scientific Exhibit—Report of Com- mittee on Necrology—Report of Secretary.....		324	Book Reviews.....		336
Report of Committee on Public Policy and Legislation.....		325			

NEXT ANNUAL SESSION, SOUTH BEND, SEPT. 22, 23, 24, 1920.

LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.

ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS
OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103,
ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

Just Ready New (2d) Edition

Principles and Practice of Surgery—Ashhurst

MUCH new matter has been introduced, some sections have been entirely rewritten, and all portions of the volume have been thoroughly revised and brought up to date. These additions have added about sixty pages to the volume, in spite of continued efforts at conciseness of expression and omission of the unessential.

THE growing importance of Reconstructive Surgery caused the author to collate all material on the subject in an entirely new chapter. The chapter on Gunshot Wounds has been entirely rewritten, as have also the sections in other chapters dealing with Shock, Infected Wounds, Carcinoma of the Tongue, Empyema, Typhoid Carriers and Surgery of the Pancreas.

SEVEN new colored plates and over one hundred new illustrations have been inserted. Most of the new skiagraphs are from the writer's services at the Episcopal and Orthopædic Hospitals and from the Walter Reed General Hospital. The photographs illustrating the Carrel-Dakin method of wound treatment are from the latter hospital. The work is divided into three parts. Nine chapters are devoted to General Surgery, seven chapters to Systemic Surgery, and thirteen chapters to Regional Surgery. Students and practitioners alike will find this text of immensely practical value.

By ASTLEY P. C. ASHHURST, A.B., M.D., F.A.C.S.

Associate in Surgery, University of Pennsylvania; Surgeon to the Episcopal Hospital and to the Philadelphia Orthopædic Hospital and Infirmary for Nervous Diseases; Colonel, Medical Corps, U. S. A.

Octavo, 1202 pages, with 14 colored plates and 1129 illustrations in the text, mostly original. Cloth, \$10.00 net

706-710 Sansom Street
PHILADELPHIA

LEA & FEBIGER

2 West 45th Street
NEW YORK

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, South Bend, September 22, 23 and 24, 1920

OFFICERS AND COMMITTEES FOR 1920

President CHARLES H. McCULLY, Logansport
 1st Vice President BUDD VAN SWERINGEN, Fort Wayne
 2d Vice President SAMUEL HOLLIS, Hartford City, Ind. 3d Vice President CHARLES STOLTZ, South Bend
 Secretary-Treasurer CHAS. N. COMBS, Terre Haute

SECTION OFFICERS

Surgical Section—Chairman, James Y. Welborn, Evansville; Vice Chairman, M. R. Combs, Terre Haute; Secretary, H. O. Shafer, Rochester.

Medical Section—Chairman, Charles P. Emerson, Indianapolis; Vice Chairman, B. S. Hunt, Winchester; Secretary, Jane Ketcham, Indianapolis.

Eye, Ear, Nose and Throat Section—Chairman, John R. Newcomb, Indianapolis; Secretary, E. M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1920), Joseph Rilus Eastman, Indianapolis. Alternate, Miles F. Porter, Fort Wayne.
 For two years (term expires December 31, 1921), Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington.

COUNCILORS

Chairman, G. W. H. Kemper, Muncie.

DISTRICT	TERM EXPIRES	DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920	7th—S. E. Earp, Indianapolis.....	December 31, 1923
2d—J. B. Maple, Sullivan	December 31, 1921	8th—G. W. H. Kemper, Muncie.....	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922	9th—William R. Moffitt, Lafayette.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920	10th—E. M. Shanklin, Hammond.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921	11th—G. G. Eckhart, Marion.....	December 31, 1921
6th—T. S. Spilman, Connersville.....	December 31, 1922	12th—E. E. Morgan, Fort Wayne.....	December 31, 1922
		13th—H. M. Miller, South Bend.....	December 31, 1920

(See list of committees on page iv)

The HYGEIA HOSPITAL SERVICE

offers a medication of definite therapeutic value in the correction of narcotism and alcoholism. Hyoscine-Scopolamine have no influence in destroying the craving—separating the user from the drug is not a treatment—the craving must be destroyed—there is but slight discomfort from the treatment. The toxemias resulting from the habits are corrected.

WM. K. McLAUGHLIN, M. D., Supt.

Office State-Lake Bldg., Suite 702-4

Chicago, Ill.

If Interested Write for Reprints

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., SEPTEMBER 15, 1920

NUMBER 9

ORIGINAL ARTICLES

HYPERACTIVITY OF THE THYROID

DR. MILES F. PORTER, JR.
FORT WAYNE, IND.

Within recent years the etiology of disturbed thyroid function has been the object of renewed interest. It has been a quite generally accepted belief that the causative factor of goiter (with or without disturbed function) is most frequently conveyed to the human organism through drinking water. By what means goiterigenous waters acquire their harmful properties and to what constituents their toxic effects are due, are questions that have never been satisfactorily answered. Magnesium, iron and copper pyrites; the degree of hardness; the content of iodine, carbon dioxide, salt or absorbed air, have all been suggested, but adequate proof of their causal relationship is lacking. Some evidence has been adduced to show that water derived from certain geologic formations is most frequently the bearer of the toxic constituents. Radioactivity and the presence of an organic ferment have also been suggested and some experimental evidence brought forward to strengthen the contention.

The evidence developed in recent years is of interest because it tends to show that goiter is the result of a living infective agent, most commonly transmitted through water and soil, but not exclusively. I wish to emphasize particularly the following experiments and clinical observations in support of this theory. McCarrison fed the residue separated by filtration from goiterigenous water to young men and produced goiter about fifteen days from the beginning of the experiment. He further treated 100 cases of endemic goiter by 10 gr. doses of thymol night and morning, greatly benefiting

or curing the majority, concluding that the intestinal tract was the seat of the infection. Ebstein, Hemmeter and Messerli had similar results. Lactic acid ferments produced marked improvement. Vaccines containing most of the bacteria of the intestinal flora; containing a predominant bacillus of the colon group, and even exogenous vaccines, were used successfully.

McCarrison also produced goiter in goats by feeding them water polluted with feces of goiter sufferers. Bircher proved that goiter could be produced in rats by water that had passed through a Berkefeld filter, but not through a dialyser; Wilms that such water heated to 70 C. loses its harmful properties; Bircher that centrifugalization, and also filtration through 30 cm. of powdered charcoal would render such water innocuous and finally, as has long been known, that boiling destroys the toxic power of goiterigenous waters.

Lane has suggested that the absorption of toxins from the large intestine is a frequent cause of disturbed thyroid function. Still more recently a large number of clinicians have called attention to the apparent causal relationship of various focal infections, notably the teeth, tonsils, sinuses, gallbladder, prostate, etc. Personally I have seen acute tonsillitis, acute pyelonephritis and acute cholecystitis so promptly followed by active and intense hyperactivity of the thyroid as to make me doubt whether mere coincidence could explain the sequence. Equally striking is the rapid subsidence of the symptoms marking the hyperactivity on the removal of the focus of infection.

Granting that a living infective agent does produce goiter and perverted thyroid secretion it seems evident from the above observations that it need not necessarily always be the same agent. A water borne toxin which will pass through a Berkefeld filter, but not through a dialyser, and which is destroyed by standing, shaking and centrifugalization can scarcely be

identical with a toxin elaborated by a focal infection of obvious bacterial origin in the tonsils, gallbladder, etc.

If then hyperactivity of the thyroid is commonly due to infective or toxic agents by what mechanism is this produced? Is it by direct action on the thyroid or not?

On the one hand, an actual infectious process of the thyroid is rare, although cases of hyperthyroidism associated with thyroiditis and even abscess of the gland have been observed. On the other hand, Pottenger has shown that toxins do stimulate the nerves of the sympathetic autonomic nervous system. Wilson and Durant have found definite histologic changes of degenerative character in the cells of the sympathetic cervical ganglia in thyrotoxicosis. Physiologists have assumed as proven that hyperactivity of the thyroid and adrenals is a part of the body's defensive mechanism. Observations made during the recent pandemic of influenza indicate an adrenal insufficiency consequent on the infection, explained as an exhaustion of productive function due to excessive stimulation. Now the thyroid and adrenals are reciprocally stimulating glands—so excessive demand on the one must lead to a like hyperactivity of the other.

Furthermore, it has been frequently observed that sudden nervous or emotional shock may produce hyperactivity of the thyroid—and Cannon has shown that the major emotions, and Ramond and Francois that prolonged nervous and emotional strains, have exactly the same effect on the sympathetic systems as toxins have. Cannon also produced symptoms similar to those of exophthalmic goiter by continuous excitation of the sympathetic nervous system in an experiment in which the phrenic nerve was joined to the peripheral portion of the cut cervical sympathetic of a cat. Whether toxins cause hyperactivity of the thyroid through the stimulation of the sympathetics is uncertain, but in any event we may say that toxins do stimulate these nerves and that these toxic states are followed by increased activity of the thyroid and adrenals as well. Pottenger puts it as follows:

"The cause of hyperthyroidism is a stimulation which must come from some reciprocally acting internal secretion such as adrenin; some other chemical products; or through stimulation of the cervical sympathetics, the latter possibly as a part of a general sympathetic stimulation such as occurs in states depending on the major emotions or the action of toxins."

Kendall has isolated the active substance of the thyroid to which he has given the name thyroxin; and with Plummer has apparently proven that its action is directly on the tissue cells, controlling their energy output. The total amount of thyroxin present in the human economy under normal conditions is estimated at 23 to 50 mg., and Kendall has shown that $\frac{1}{3}$ mg. will raise the basal metabolism of a 150-pound man 1 per cent. These figures illustrate strikingly the extreme nicety of endocrine balance.

As a result then of toxic or more rarely nervous influences, the former most commonly but not necessarily water borne, we have an overactivity of the thyroid and an increased production of thyroxin, resulting in the clinical symptoms familiar to us under the name of hyperthyroidism, thyrotoxicosis, Grave's disease, etc.

In a general way the cardinal, clinical manifestations of hyperactivity of the thyroid are so well known that they need scarcely more than simple enumeration. The failure of eye convergence or its too ready fatigue, the widened palpebral fissure, lagging eyelid, inability to wrinkle the forehead, exophthalmos, tremor, vasomotor and emotional instability, nausea, vomiting and diarrhea, tachycardia and myocardial degeneration, abnormal blood pressure, increased sensitivity to epinephrin, increased basal metabolism and alimentary hyperglycemia with or without demonstrable thyroid enlargement, constitute an extremely common and readily recognizable disease. Without attempting to enter into an exhaustive and exhausting consideration of the mode of production of these symptoms I should like to call your attention to the consideration of some of the most important viewed from a diagnostic standpoint.

Tachycardia is at once the most constant and persistent symptom and is usually out of all proportion to the demonstrable myocardial changes. It is safe to say that a pulse of 110 or over without any symptoms of decompensation is almost invariably thyrogenic. We have been struck repeatedly by the apparent comfort of patients with pulse rates of 120 to 140.

The blood pressure, contrary to the commonly held view, is raised by hypersecretion of the thyroid. If the thyroid and adrenals are reciprocally stimulating, and hypersecretion of the one means increased mobilization of the secretion of the other it is evident that we should expect a pressor effect following stimulation of either. Personally I am at a loss to explain this

widespread belief that low blood pressures are the rule. In the early cases high pressures are almost invariable. Obviously when the brown degeneration of the cardiac muscle is advanced low pressures are the natural result of the myocardial weakness. Earlier recognition of this condition will correct this false impression I am confident.

Of the newer diagnostic procedures, considerable interest attaches to the Goetsch epinephrin test. These patients are distinctly hypersensitive to epinephrin and Goetsch suggested its use as a method of differential diagnosis. The patient if ambulatory is allowed to recline quietly for an hour or preferably longer, when observation is made of the pulse rate, blood pressure, respiratory rate and the general subjective and objective condition of the patient, especially with regard to the tremor, the subjective nervous manifestations, and the signs of vasomotor and cardiovascular disturbances such as throbbing in the neck, pallor, or flushing, perspiration, etc.; 0.5 c.c. of 1:1,000 adrenalin solution is then given subcutaneously in the deltoid region. Readings are then made every five minutes for an hour, and every ten minutes for thirty minutes longer. In the vast majority of cases a great many fewer readings prove necessary to determine the presence or absence of sensitivity. In a positive reaction there is an early rise in the blood pressure and pulse of at least 10 points, and sometimes of 50 points. In thirty to thirty-five minutes there is a moderate fall, then a secondary rise, then a fall to normal in about one and a half hours. Increased tremor, apprehension, throbbing, asthenia, pallor from vasoconstriction followed in fifteen to thirty minutes by flushing and sweating from vasodilatation, slight rise in temperature and diuresis, are other signs of a positive reaction. It should be emphasized that pulse rate or blood pressure alone should not be the criterion by which positivity is judged. The entire clinical picture must be considered as a whole. Roughly speaking the intensity of the reaction varies with the degree of thyroxin toxicity. A word of caution is not amiss in this connection. Startlingly severe reactions do occur in cases in which they are least suspected. The test should be used, in my opinion, only in the very early cases, or very mild ones in which there is a marked dearth of symptoms and signs.

In hyperthyroidism as shown by Tachau, in 1911, there is a diminished tolerance of carbohydrates with alimentary hyperglycemia, associated with glycosuria whenever the hyperglycemia exceeds the renal glucose thresh-

old. The sugar content of the fasting blood is first measured, the patient then ingests 100 gm. of glucose and the blood sugar content again measured at the end of one and two hours. In almost every case in which there is hyperactivity of the thyroid increased blood sugar values (from 50 to 200 per cent.) will be found within two hours. Unfortunately other conditions most notably diabetes and alcoholism but others as well, are associated with alimentary hyperglycemia so positive findings are less valuable in proving the existence of hyperactivity than are negative findings in ruling it out.

The very recent manufacture of a compact and portable respiration apparatus by which the basal metabolism may be computed has given added interest to this extremely important procedure. As Kendall pointed out thyroxin increases metabolism, and the increase is quantitatively proportional to the amount of thyroxin secreted. Accordingly not only is an increased basal metabolism reliable evidence of thyroid overactivity but an accurate measure of the degree of overactivity. Basal metabolism readings are consequently not only of value in diagnosis, but also in prognosis and in measuring the effect of the treatment. Of the symptoms and signs other than tachycardia and blood pressure changes I wish to say only that most of them are present only after diagnosis has become extremely easy. This applies particularly to the eye signs, gastro-intestinal disturbances and cardiac arrhythmia. Some degree of vasomotor and emotional instability are present, however, very early in the disease, and are, in my opinion, exceedingly valuable aids in diagnosis. Profuse perspiration, flushing of the face, undue sensitivity to heat and unwarranted emotional reactions are the most common early manifestations.

Of the treatment I shall speak only in a very general way. The pendulum which had swung so decidedly to the side of surgery, is swinging back and will swing still further as earlier diagnoses are made and preventive and curative measures more promptly instituted. It should be constantly borne in mind that no surgical procedure, whether ligation, lobectomy or subtotal thyroidectomy, is directed toward the removal of the cause of the hyperactivity nor to the relief of associated endocrine perversions. It should be further remembered that surgery is not well adapted to the relief of the hyperactivity of very slightly enlarged or normal sized glands, and earlier and more accurate diagnoses should make these the most common forms presenting themselves for treatment. In other words, our attention and efforts should be di-

rected more largely to the detection of thyroid hyperactivity before material enlargement of the gland has occurred, and before the development of the more severe symptoms and signs. Still more difficult, but even more essential, is the study of the individual for possible causal infections, toxemias metabolic or otherwise, or undue mental and nervous strains or shocks, and their prompt removal wherever possible. In this connection let me say that given a case of thyroid hyperactivity with a demonstrable focus of infection I should first give my attention to the removal of this focus, even though the other indications were for thyroid surgery.

The problem is then one of prevention and early control. Even in highly goitrous regions we do not see nearly as many of the desperate, almost inoperable cases as we did because the patient no longer waits till he is half dead before submitting to surgery. May I venture the prediction that we shall similarly see fewer cases that need operation when we have learned to institute preventive and controlling measures before the disease is literally "staring us in the face."

THE PHYSICIAN

THE YOUNG DOCTOR

FRANK B. WYNN, M.D.
INDIANAPOLIS

The present age is preeminently that of the *young man*. The world has made bold to acclaim him efficient and worthy of confidence. Not rarely it has unfeelingly pushed his senior into the background. From the bitterness of his heart the latter cries out: "Is experience to count for naught? Are the rash years of youth to outweigh those of wisdom and discretion? Is the effervescence of life preferable to its pure liquid distilled by trial and ripened by age? Let not youth be puffed up. Some day he too will be an old man." But the mills grind on. Capital, eager for dividends and expansion, has placed the burden of large business on the shoulders of young men. Colleges anxious to energize and direct the enthusiasms of the molding period of life, seek teachers who dream dreams; and whose character and courage have not been made heavy by the mud of sordid experience. In the great World War the demand was for young men—in the trenches, behind the big guns, on the sea, in the hospital corps,

at headquarters; wherever, in fact, energy, skill and courage were required to put over a big job, young men had the first call.

Medicine is the one field in which the call for the young man has not been generally heeded. There still exists a deep-rooted prejudice and dubiousness about the youthful practitioner. With all of us, memory harks back to the epochal day when the sign was first hung out to invite patronage. In the long months of waiting what horrid realities took the place of our rosy dreams! The youth, to whom we had read the world of poetry and song paid homage, seemed not the same as the young practitioner courting the favor of the community. The halo worn during student days was transformed into a crown of thorns—criticisms and misgivings of a doubtful public. The wise-acre commented on the beardless face of the young practitioner. His inexperience and impetuosity were dangerous; his dreaming and theorizing not suited to the realities of medical practice. Let him grow the beard of strength, develop the wrinkles of character and the gray hairs of wisdom, was the caustic summary.

Physicians, like other folks, have varying endowments and capacities. It would be folly to attempt the standardization of their habits and methods of medical practice. These will differ as the men differ in their nature and training. It may not be amiss, however, to discuss some of the elements of character and conduct which might impede the progress of the young practitioner.

The development of the physician's reputation is always an interesting psychologic phenomenon. A false step and he may gain a bad name over night. His intimate contact with people soon enables them to learn his weaknesses, and not a few will be the peddlers of gossip about them. If it is a bad temper, a lying tongue, a weakness for drink, a sensuous nature, a vulgar habit, an insincere nature, a mercenary bent, rest assured the knowledge will soon become common property. Public sentiment will quickly and unrelentingly place the mark of Cain on him. On the other hand, the good name which Solomon proclaimed as better than riches comes only through travail and long waiting. Patience and time alone will bestow the reputation for ability, punctiliousness, thoroughness, earnestness and faithfulness.

In one's medical career as in a horse-race, a great deal depends on making a good start. What, then, is the right kind of start? I am reminded here of the fable of the hare and the tortoise. It well be remembered that the hare

* Fifth of a series of articles by Dr. Wynn which will appear regularly in *The Journal*.

was swift of foot, but the tortoise won. So would I wish for the young man, the plodding and tenacious, rather than the dashing race. Practice which is dropped into one's lap is very apt to be dropped out again. The same law of economics holds as in the rich man's son, who proverbially dissipates his father's fortune. On the other hand, that which has been earned by patient endeavor and painful waiting will not forsake you easily. The real *clientele* who pay well, stick by you through thick and thin, and in their loyalty of friendship are the finest recompense of practice, are the patrons who have been won by long and faithful service. Let the young man in the very beginning of his career avoid searching for "soft snaps." They are dangerous, begetting slothful habits and smothering the flame of aspiration. Rather let him search for the difficult tasks and *will* to win them.

Financial stringency is the lot of the young practitioner. The period of preparation has been long and expensive, often entailing heavy debt. Not old debts alone but current obligations give him cause for anxiety. Rising before his imagination is a specter which commands him to make money somehow or other. Oppressed by apprehensive gloom he is in danger of resorting to tricks to secure practice—newspaper prominence, or the more surreptitious propaganda of his abilities. Temptation also comes to engage in contract or lodge practice, or make petty "inspections" for a multimillionaire corporation. It is all offensive to his sense of dignity and propriety but he salves his conscience with the thought that he must choose between the humiliation of bad credit and the superficial routine of a cheap contract doctor. The man who yields to this bait of cheap, starvation fees becomes impaled on the hook of mediocrity, from which it is difficult to shake loose. As a mere piece-worker he loses animation and initiative. Akin to the foregoing is the part-time political job.

Effort given to any of these lines of practice, takes from the few private cases he should be gaining, the thoroughness of study and care they should receive. Worst of all it tends to unfit one for the finer type of professional work which every young man has it in his heart to do. Far better for him to starve longer but stick to straight practice, doing his whole duty patiently and tenaciously until the reward of a stable professional following is attained.

Interminable almost seem the first weeks and months of waiting. No fallacy is more common than to account this wasted time. These days

may be made golden in their bearing on one's professional career. One young physician of my acquaintance, stained a thousand or more histologic and pathologic preparations during his graduate and early postgraduate period. During the first year of his practice, he studied these sections, making drawings of the more interesting ones, classifying and cataloguing them for future reference. He often remarked afterwards that it was one of the most valuable pieces of work he ever did, in its bearing on his subsequent success. Another young man sought and performed necropsies for his physician acquaintances—encouraging a good habit with them and gaining much valuable practical knowledge for himself. Not small either was to be reckoned the large number of friends and admirers he made in the profession. A third pursued a thorough and carefully planned course of investigative reading along lines representing medical progress as set forth in the best medical journals. From the Newberry Library in Chicago, the Library of the Surgeon-General's Office and other sources he secured the loan of special articles. From these he made synopses and afterward wrote articles on the respective topics which were filed away for reference. He thus acquired a storehouse of up-to-date medical knowledge which he could tap on occasion, whether it was for the medical society or for publication. The last named plan is one worthy of emulation by every young physician who aspires to more than mere business getting.

In making the right sort of a start nothing is more important than to maintain at all times a dignified equanimity. This means that in the presence of an emergency one should have absolute control of his wits; not only able to exercise wise judgment under exciting conditions, but by his calm demeanor inspire confidence and through commanding intelligence, direct the proper course of action. Oftentimes this is the most important remedy, restoring calm in the patient's mind and hope with anxious relatives. On the other hand, what a bedlam of confusion arises if the doctor loses his head! Some men possess equanimity as a gift; most are obliged to acquire it; a few are never able to master its benign influence.

One of the many pitfalls which the young practitioner is likely to encounter is that regarding diagnosis. The laity, more particularly the ignorant, are very insistent on being told promptly the exact nature of the disease. In most cases this is not difficult but in a considerable proportion, to hazard a diagnosis without

long and careful study is simply to gamble. The man who is cock-sure of diagnosis on casual examination in difficult cases, often finds himself driven from one opinion to another, to his deep embarrassment. A safer plan is to frankly admit inability to make early diagnosis, but at the same time make plain that every avenue of diagnostic procedure is being explored. Meantime, accumulating data will narrow the possibilities, and anxious relatives may be made aware of what to expect. To know under such circumstances just what and how much to say, depends on temperamental peculiarities of those concerned. With some absolute frankness is best; with others great circumspection is necessary. Saying the wrong thing may be like casting a bomb. The young practitioner should cultivate the art of dealing with people by suggestion, reason and the moral force of his own personality.

On the physician's part an error most common in this day is to follow short-cut methods in diagnosis. His training as an intern, excellent as it no doubt was, may contribute to this fault. If the patient has a cough the sputum is sent to the public laboratory. The diagnosis of pneumonia or pulmonary tuberculosis is made or excluded by the laboratory report. The location of a suspected pulmonary lesion is left to the roentgen ray when careful physical examination and clinical study would determine its position and character. In another patient fever is present, and the burden of diagnostic responsibility is placed on the Widal reaction. Or it is a cutaneous eruption and the unfortunate error is made of calling it syphilitic because a positive Wassermann is reported. Certainly no fair and wise clinician would decry these important laboratory methods. The point here urged is that the young practitioner is prone to resort to these brilliant laboratory tests, to the neglect of the common methods of careful clinical study and physical examination. The latter should always be considered as fundamental and the most important basis of diagnostic procedure. Laboratory tests are corroborative, giving refinements in differentiation and in some cases absolutely essential information.

Just as insistent will people be to know the probable outcome of the disease as to learn its diagnosis. Many older practitioners are given to laughing disease out of countenance. They assume too often that Nature will work out the cure anyway, and so exhort lightly to hope, only to find later a grave malady exists. With younger men the error more likely to be made,

is an unduly grave prognosis. Seldom is one called on to give an absolutely hopeless outlook. A case of organic, valvular disease of the heart, which I saw thirty years ago, still lives to remind me that I was wrong in my apprehension. Another patient suffering from acute nephritis, with large quantities of albumin and casts in the urine, recovered completely in the hands of another practitioner who gave a more favorable opinion as to the outcome. A young man with large, multiple abscesses, one involving the knee joint, with septic rigors and sweats, was operated on by a distinguished surgeon who introduced several drainage tubes into the joint cavity. Assembled relatives listened to the hopeless prognosis given by the surgeon. His narrative was interrupted by the piping, raspy voice of a female relative, who shouted, "He is not going to die, Doctor! He will get well. 'Science' will cure him!" And he did get well, afterwards submitting himself to me in proof; with a stiff knee-joint, however. Christian Science got the credit for a recovery which was in reality due to the surgeon's skill. How much better for him and the good name of the profession, it would have been if the surgeon had said: "It is a very desperate case. We have done the wise thing—in fact, the only thing which offers a chance for the patient's life. Let us follow this effort by faithful after treatment, hoping that drainage and food and God's help will work a miracle."

The cultivation of a dignified reserve is to be encouraged. By this I do not mean that one should suppress his natural social impulses; on the other hand, genteel sociability is to be commended. However, with those who possess strong social inclinations, the tendency will be to a degree of familiarity which may breed contempt for one as a physician. There are, therefore, certain metes and bounds of social intimacy with one's *clientele* which should not ordinarily be crossed. The young doctor who seeks local prestige by slapping people on the back and jocular familiarity bordering on the vulgar, will lose respect in the eyes of the thoughtful.

Akin to this error is the temptation to indulge in gossip about cases, a thing gaping auditors will devour with genuine relish, but a habit which will sooner or later get one in trouble. We are morally bound not to abuse the confidential relationship of patients. The utmost discretion should be exercised in not revealing any facts about the patient or his disorder, which might give him offense. Inquisitive

neighbors are always at hand, some sympathetically disposed; others moved by curiosity and sensation mongering, are very likely to distort the facts. Hence, all statements should be of a general nature, which will guard the rights and interests of the sufferer.

A limited number of young men in cities will be attracted by the alternate or assistant positions in hospitals and dispensaries. Besides the opportunity to study many cases, there is the consciousness of performing a service for the poor. In time one may hope also for a major staff appointment, which carries honor as its reward. Analogous are the assistant and part-time instructor positions in the medical schools. Their chief recompense lies in the fact that one must keep himself alert to the entire subject he teaches, else the student, more alert, will cause embarrassment. Before him, too, is the alluring hope that sometime he may succeed to a professorship in the institution. The ambition of young men in this direction is praiseworthy, but each should bear in mind that it will entail great sacrifice of time and money; and in the end, not infrequently, disappointment and envious pessimism will result. Like the field of politics, it is attended by great uncertainty and frequent miscarriages.

Following the lead of the more prominent men in medicine and surgery in continental countries, it is now becoming customary for influential practitioners to have assistants. This is mutually advantageous, especially for the older man who learns to lean heavily on a faithful and efficient assistant. Such positions undoubtedly do prepare the assistant for superior work later on. The danger lies in the assistant becoming an automaton. It tends to destroy his initiative; he becomes a follower and not a leader. Hence, too long a pursuit of an assistantship, will tend to dwarf the native ability of the assistant. A curious phenomenon is occasionally observed in an assistant which he should guard against. He not only carries out his chief's wishes, with only one thought—to reflect the ability of his superior—but unconsciously he takes on his mannerisms of dress, gesture and even tone of voice. The loyalty of such men is fine to observe, but the reaction becomes harmful, in that it stunts their own individuality. They catch the froth rather than the essence of their chief's work.

It is extremely important that the young doctor should maintain an attitude of fair and dignified courtesy toward his elder colleagues. He will be very prone to err in his behavior toward

them. It is grating to his sense of justice and fair play, to hear the praises of his seniors sung in extravagant terms, when he knows them to be stupid on many professional topics. Not easy is it to suppress open resentment, by calling attention to the antiquated methods of the older practitioner. The feeling is very likely to find expression in ridicule. When one feels this impulse taking hold on him, let him reflect in this wise: "Some day I shall be an old practitioner, and perhaps follow antiquated methods. When the time comes I hope my young colleagues will treat me with forbearance and charity. It becomes my duty at this time, therefore, to practice these virtues." Sometimes this older practitioner will be harsh in his criticism and treatment of young men. Now is the time to be cautious in retort. Some day he will fall ill. Call on him. Carry a bunch of flowers. Say to him: "Doctor, I am sorry to find you sick. Sacrificing yourself for others, I suspect, less worthy than yourself. I was called to see one of your devoted patrons the other day, Mrs. Brown, who was stricken with apoplexy. The family feel that if you could only see her, there might be a chance for her life. I am taking care of her as best I can, until you are able to take charge of the case, which I trust will be very soon." Thereupon begins a friendship between the old doctor and the new—a professional cordiality which will ripen into rich fruit for each as the years go by.

The young practitioner who proves himself faithful in a few professional things will soon find himself master over many. The goal which the idealism of the profession holds before his eyes, is that of diagnosing disease; and having done this to effect cure or alleviate suffering. The standard by which the world measures a man most frequently is his income; the professional standard is that of faithful and efficient service. The pathway is long and tortuous; its goal distant. The end of the journey may sometimes be attained by swift methods—by the aeroplane route of advertising, bombastic aggressiveness, and unscrupulous deception. But such travelers are apt to fall by the wayside in disaster. Better far is it to set out with the grim determination of plodding every foot of the tiresome trail; overcoming its obstacles by patient endeavor; turning not back but going always forward in progressive things; holding fast to the truth until the summit of the mountain of finer achievement is attained—where large visions of life and great rewards await the faithful.

(To be continued.)



CHARLES H. McCULLY

President of the Indiana State Medical Association, 1919-1920



BUDD VAN SWERINGEN
FIRST VICE PRESIDENT
FORT WAYNE



CHARLES STOLTZ
THIRD VICE PRESIDENT
SOUTH BEND



CHAS. N. COMBS
SECRETARY-TREASURER
TERRE HAUTE



JAMES Y. WELBORN
CHAIRMAN SURGICAL SECTION
EVANSVILLE



JOHN R. NEWCOMB
CHAIRMAN EYE, EAR, NOSE AND THROAT SECTION
INDIANAPOLIS



CHARLES P. EMERSON
CHAIRMAN MEDICAL SECTION
INDIANAPOLIS



H. O. SHAFER
SECRETARY SURGICAL SECTION
ROCHESTER



E. M. SHANKLIN
SEC. EYE EAR NOSE AND THROAT SECTION
HAMMOND



JANE KETCHAM
SECRETARY MEDICAL SECTION
INDIANAPOLIS

THE SOUTH BEND SESSION

The Indiana State Medical Association will hold its annual session at South Bend Wednesday, Thursday and Friday, September 22, 23 and 24. The members who have attended previous sessions that have been held at South Bend will remember the cordial reception and splendid hospitality offered the members of the medical profession by the citizens and medical men of South Bend. If previous experience is any guide, those who attend the coming session of the Association are assured of a warm welcome, and entertainment which will go a long

Saginaw moraine. In other words, South Bend lies where three great ice lobes met, the Michigan lobe, and the Erie and Saginaw lobes. The waters flowing from these ice fields, carving out the great Kankakee channel, left a beautiful level plain on which South Bend is situated. As evidence of the beauty spot on which it is located, the chief engineer who made the survey of the Michigan road, north through Indiana when the north half of the state was a primeval wilderness, made the following note on the field records. "This is a beautiful spot



ST. JOSEPH HOSPITAL

way toward making the visit a memorable one. The scientific committee also has been busy this year and has provided a program of unusual excellence.

South Bend is not only the queen city of the St. Joseph, but it is the queen city of the state, located as it is in the most beautiful valley in the state and situated on the banks of one of the largest and most rapid running rivers of the state, with high, well defined banks, free from marshes, swamps or low grounds.

Geologically, South Bend is peculiarly and interestingly located. It lies between the lateral Maumee moraine on the South and the Michigan moraine on the north, and its limits bounded on the east by the lower point of the

for a town." This note was made where the road touched the St. Joseph River and turned west to what is now Michigan City. Time proved the judgment of the engineer to be correct, as one of the handsomest and most flourishing small cities within the confines of the United States now adorns that spot.

To the student of history, this region is replete with interesting and startling events. St. Joseph County and the immediate vicinity of South Bend was the ground first trodden by the feet of white men. On his last, his death-bed journey, Father James Marquette, with his faithful companion, Allouez, coming up the Kankakee from the Mississippi in May, 1675, crossed the famous Portage known to the In-

dians even as far east as New York and New England, to the St. Joseph River, whence he passed down this river and died, and was buried on the shores of Lake Michigan, having concentrated within the narrow span of 38 years more adventure, more civilizing influence, more ethnologic and geographic knowledge of the Western Hemisphere, than any other man excepting only Magellan. Two years later, in December, 1676, Rene Robert Sieur de La Salle, with Father Hennepin and Tonti, traveled the same territory as Father Marquette, reversing their route from Lake Michigan up the St. Joseph River, across the Portage, thence into the headwaters of the Kankakee, to the Illinois, and finally into the Mississippi River. Mural

carried our brave young men to success on the battle fields of France. Who in Indiana has not read and been thrilled with the campaign of George Roger Clark, of Revolutionary fame, who wrested from the British all that territory, including Indiana and Illinois and parts of Michigan and Wisconsin, known as Kaskaskia. The last fort of the British, Fort St. Joseph, across the line in Michigan, fell to the Americans, which forever ended the rule of England in this western territory. On the memorable campaign of Clark, so far reaching in its results, it was another French priest, Father Gibault, who acted as guide to the American expedition from Vincennes.

Needless to go into the early history of the



EPWORTH HOSPITAL

paintings of these indomitable voyagers may be seen in the County Court House opposite the Oliver Hotel. The famous Portage, beginning on the banks of the St. Joseph River, is just at the north edge of the city adjoining River View Cemetery, and is one of the most picturesque spots on this rapid but silent and historic river. From this point along the banks to Mishawaka and Osceola, La Salle was lost for a night and a day, having wandered off by himself without his faithful Indian guide. In 1721, Father Charlevoix, another intrepid French explorer and missionary, traversed this same territory.

Later on in 1779 we come to more recent and thrilling events demanding such unconquerable determination, such loyalty and patriotism, fore-runners of that same spirit to do or die which

present city of South Bend except to mention the names of Alexis Coquillard, another Frenchman, and Lathrop M. Taylor, who may be considered the founders, having conjointly planned the first map of the town.

The industries of a city, always of interest to the visiting stranger, may be described in the instance of South Bend as first monumental in their size and capacity, and second as developmental, not only as to the city but as to the country at large. The Studebaker Wagon Works for years were the largest in the world. Equally as important and of world-wide reputation were and still are the Oliver Chilled Plow Works. Transportation in the west would have been impossible without the Studebaker wagons. Agriculture, which made this country the gran-

ary of the world, was made possible by the Oliver Chilled Plow Works. Next came the cabinet works of the world famous Singer Sewing Machine Company. The plant of the Singer Sewing Machine Company is located in the western part of the city, occupies 76 acres of land, and furnishes employment to over 3,000 men. The Singer sewing machine is a product of world-wide distribution, completed machines being shipped from South Bend to Japan and the Orient, as well as Australia, South Africa, and many European countries. To this trio of giants South Bend owes its fame. And still they are expanding, ever meeting the needs of increasing population and the advance of civilization. Since the advent of the gas motor the

heat and light, hot and cold water, and sewer connections.

Shell production of the world war would have been seriously hampered had it not been for the South Bend Lathe Works. The South Bend Watch is known the land over, and equals in accuracy and refinement of mechanism the standard watches of the day.

Who keeps you warm in winter? The Stephenson Underwear Mills of South Bend. What paint is used on your walls and bath rooms? Liquid Velvet, made in South Bend by the O'Brien Varnish Company. Whose shirts do you wear? Wilson Brothers. What is to the expensive motorcycle what the Ford Car is to the expensive automobile? The Johnson Motor



MEDICAL DEPARTMENT OF PUBLIC LIBRARY

Studebaker wagon has given way in part to the automobile, and in this transformation the new vehicle is up to the standard of Studebaker perfection. The latest addition to this mammoth industry will take care of the production of the celebrated Studebaker Light Six, at a cost of \$15,000,000. Twenty million dollars have been appropriated to make the Studebaker automobile second to none in the world. Visitors are invited to inspect these plants in the spare hours between sessions.

Likewise the Oliver plant is expending \$5,000,000 in seven additional new buildings, each 200 and 300 feet, to supply gang plows to be used with the Ford Tractor. Both corporations are constructing dwellings for their increasing labor. These are modern homes supplied with

Wheel, made in South Bend. And so on, ad infinitum.

In the neighboring town of Mishawaka, contiguous to South Bend, 4 miles distant and connected by trolley, the visitor may inspect the Mishawaka Woolen and Rubber Company's product. What powder is to the shaft and tunnel miner the Mishawaka Rubber Boot is to the placer miner of Alaska, and to the lumber jack of the Northwest. Mishawaka likewise is the home of the Indestructo Trunk, and who is not the owner of one?

The population of South Bend at the last census was 70,000, and has increased 5,000 since then. It is estimated that within the next ten years South Bend will reach the 125,000 mark in population.

Educationally, our school system rivals the best in the state; see our high school, the last word in school construction. And while on the subject of education, South Bend is proud of its two neighboring institutions, Notre Dame University and St. Mary's College. Both may be reached in ten minutes by trolley. At both institutions a warm welcome is extended. Every Indian with sportsman's blood in his veins, the kind of blood which won the war, knows of the athletic prowess of Notre Dame, state champions in many contests on the ball field

vent bred girl from her sister trained in the ultra-fashionable institutions of the country.

And does the visitor love golf? Chain-O-Lakes, the South Bend Country Club and Golf Course will be his Mecca. Every year the links are becoming better, every year attracting noted experts. Only four weeks ago four golf experts gave an exhibition game on the Golf Course. Full eighteen holes can be played. At the Country Club the ladies of the convention will be entertained.

Medically speaking, South Bend is not



ST. JOSEPH HOSPITAL, MISHAWAKA

and gridiron. It was the football team from Notre Dame that dared to invade the East, and teach the redoubtable West Pointers the forward pass, a play which has figured so prominently in all recent football contests. But sport is only a side issue at Notre Dame. Its scientific, classical, journal and law courses are unexcelled anywhere. St. Marys is the ideal college to train young women. Sufficiently removed from the turmoil of the fashionable world, the Sisters of Holy Cross here impart all the modesty and refinement of womanhood which the modern world so much stands in need of, and which so sharply distinguishes the con-

ashed of its local society, and to its membership the state secretary can testify. It points with justifiable pride to the Medical Library and reading room in the Public Library, which all members are urged to visit. Attendants of the library are every ready to supply information and look up references.

Three hospitals are at command of the profession and public, Epworth Hospital, St. Joseph Hospital in South Bend, and the St. Joseph Hospital in Mishawaka. All have the latest roentgen-ray apparatuses. Epworth Hospital and St. Joseph Hospital, Mishawaka, have competent bacteriologists and pathologists.

St. Joseph County, of which South Bend is the capital, built and supports from county funds, a tuberculosis hospital known as "Healthwin." This institution is located on the banks of the beautiful St. Joe, 1 mile north and below Mosquito Glen, also known as Pin Hook, which marks the historical Portage trod-



HOTEL OLIVER



COURT HOUSE

den by Marquette, La Salle and Charlevoix. The hospital has 105 beds constantly filled. The reputation and efficiency of this institution is

so well known that the government has intrusted to it a waiting list of ex-service men of whom there are over forty at present taking advantage of the salubrious and invigorating air and the paternal oversight of Dr. R. L. Sensenich and Dr. S. A. Clark, trustees of the hos-

Committees will meet all visitors at all trains. A ladies' committee will provide amusement and auto rides and luncheons for the visiting women. The committee on arrangement has made all preparations for a smoker Tuesday evening, September 22, in the Rotary Room of the



POSTOFFICE



HIGH SCHOOL

pital and members of the local society. In connection with the hospital an industrial school gives ex-service men, who are regaining their health, an opportunity to acquire an education, or perfect themselves in any trade they may choose, or for which they seem best fitted.

Oliver Hotel. On Thursday evening a public meeting addressed by speakers furnished by the state Association, will be held in the auditorium of the South Bend High School.

All clubs of the city will be open to the visitors, viz., Indiana and University Club, Com-

mercial Athletic Club, and the South Bend Country Club.

A guide chart showing points of interest about the city and how to reach them will be given each visiting member.

The Oliver Hotel will be headquarters for the session.

is an unusually interesting one, combining as it does papers of general interest as well as papers of special interest to the three great specialties that are represented by three separate programs. The Committee on Arrangements has provided adequate assembly rooms and has arranged for social features which will add to the



Y. M. C. A.



NOTRE DAME UNIVERSITY

SOUTH BEND'S WELCOME

For this year's session of the Indiana State Medical Association, South Bend, including citizens as well as medical men, extends a cordial welcome to all the members of the Association and their friends, and nothing will be left undone to care for the comfort, pleasure and benefit of all who come. The scientific program

pleasure of the visitors and the general success of the session. The ladies especially have been invited and entertainment has been provided for them for the period when the scientific meetings are in session. The various clubs will be opened to visitors, and cards entitling the visitors to the privileges of these clubs may be obtained from the Committee on Arrangements. The

hospitals also will keep "open house" for visitors and extend a cordial welcome. It is desired especially that the members of the Association come early with a view to attending the smoker on Wednesday night, September 22, and for the purpose of being on hand for the opening of the scientific meetings early the next

here will be held the meetings of the Council, the House of Delegates, the general meetings and the meetings of the Section on Surgery. The smoker on Wednesday evening and the commercial exhibits also will be held at the Oliver Hotel. The Elk's Club has been selected for the meetings of the Section on Medicine and



STUDEBAKER CORPORATION



SINGER MANUFACTURING CO.

morning. Following the precedent of preceding years the Committee on Arrangements has provided no entertainments, clinical or junketing trips to interfere with the scientific meetings which are considered first in importance.

PLACES AND TIME OF MEETINGS

The Oliver Hotel has been selected as the general headquarters for the Association and

the Eye, Ear, Nose and Throat Section. The general public meeting of Thursday evening will be held in the auditorium of the high school. The South Bend Country Club is the place selected for the luncheon at 12:30 on Thursday for the visiting ladies. Automobile drives also have been arranged for all those who desire to avail themselves of such entertainment during the interim of meetings.

REGISTRATION

It is requested that immediately on arrival at South Bend the members of the Association should proceed at once to the Registration Bureau at the Hotel Oliver and register. Registration will be by membership card and to avoid delay and confusion members are urged to have their cards ready for inspection by the Registration Committee. Registering members are requested to indicate the number of ladies in the party so that the Committee on Entertainment may know early the number to be provided for. Badges will be furnished to the members for identification. Letters and telegrams may be sent to the Hotel Oliver in charge of the Committee on Registration.

HOTELS

The Hotel Oliver is the headquarters of the Association. It will be able to care for only a

County, 2 delegates; Lake County, 2 delegates; Vigo County, 2 delegates; the other 83 counties, each one. (Providing if Delaware-Blackford County returns two more paid-up members and if St. Joseph County returns three more paid-up members prior to the annual session, they will each be entitled to one extra delegate.) The thirteen councilors, the President and Secretary of the Association and the last three ex-presidents, namely, Drs. John H. Oliver, J. Rilus Eastman and W. H. Stemm.

Properly executed credentials for delegates should be sent to Dr. C. C. Campbell, Indianapolis, or brought to the meeting. No delegate will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 7 p. m., Wednesday, September 22, in Parlor A, Oliver Hotel, and again at 9 a. m., Friday, September 24, at the same place.

The order of business will be as follows:



OLIVER PLOW WORKS

limited number of the visitors, but the Hotel Jefferson and several other hotels will be able to care for the overflow. Those who have any difficulty in securing accommodations should get in touch with the Committee on Arrangements at once. There are numerous smaller hotels and boarding houses which will afford accommodations at reasonable rates, and the Committee on Arrangements will provide rooms in private families for those who desire to avail themselves of such accommodations, if notified at least forty-eight hours in advance.

OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at South Bend, Wednesday, Thursday and Friday, September 22, 23 and 24, 1920.

The House of Delegates will be constituted as follows: Marion County, 7 delegates; Allen

1. Call to order by president.
2. Roll call and seating of qualified delegates.
3. Reading minutes of previous meeting.
4. Reports of officers, secretary-treasurer and executive secretary.
5. Reports of Standing Committees: (a) Credentials; (b) Arrangements; (c) Scientific Work; (d) Administration and Medical Defense; (e) Necrology; (f) Publication; (g) Scientific Exhibits; (h) Public Policy and Legislation; (i) Medical Education; (j) Industrial and Civic Relations; (k) Hospital Standardization.
6. Reading of communications.
7. Reading of memorials and resolutions.
8. Unfinished business and report of special committees; (a) Revision of constitution and by-laws.
9. New business.
10. Adjournment.

Election of officers will be the first order of business Friday at 9 a. m. In addition to the regular officers, the terms of the following expire January 1, 1921, and their successors must be elected at this session:

Delegates to the American Medical Association, to succeed J. Rilus Eastman, Indianapolis; alternate, Miles F. Porter, Fort Wayne, to be elected for the ensuing two years. Delegates must have been members in good standing of this Association and of the American Medical Association for the past two years.

Member of the Committee on Administration and Medical Defense, to succeed Dr. F. B. Wynn, Indianapolis, for the ensuing three years.

Delegates from counties comprising the First, Fourth, Seventh, Tenth and Thirteenth Districts are reminded that their councilors' terms will expire on December 31, 1920, to succeed the following: First District, J. Y. Welborn, Evansville; Fourth District, A. J. Osterman, Seymour; Seventh District, T. B. Eastman, Indianapolis (deceased); Tenth District, E. M. Shanklin, Hammond; Thirteenth District, H. M. Miller, South Bend.

The Council will recommend to the House of Delegates that for reasons of transportation convenience, the following changes be made in the councilor districts:

Transfer Laporte County from the Tenth District to the Thirteenth District.

Transfer Benton County from the Tenth District to the Ninth District.

Transfer White County from the Eleventh District to the Tenth District.

CHARLES N. COMBS, Secretary.

ANNOUNCEMENTS

Essayists are reminded that all papers presented before the Association become the property of the Association, and, therefore, are not to be published or submitted for publication elsewhere than in *THE JOURNAL* of the Indiana State Medical Association.

The smoker for Wednesday evening promises to have some features which will make it "different" from the usual smoker, and members are urged to come to South Bend early to participate in this affair for the renewing of old and the making of new friendships and acquaintances.

The members and those accompanying them are requested to register on their arrival. The bureau of information and registration is in the Oliver Hotel. Present your membership cards when registering. Members without their cards may register after their standing has been verified by consulting the records.

The election of officers will be the first order of business at the meeting of the House of Delegates held at the Hotel Oliver in the second large room from Rotary Club Room, Wednesday, September 22. No member of the House of Delegates is eligible to office, and delegates to the American Medical Association must have been members in good standing of the A. M. A. for the past two years.

You are requested to wear the official badge, which is supplied when you register, when attending or participating in the meetings. Members of the House of Delegates will have designating badges. Only those who are accredited delegates are entitled to vote at the meetings of the House of Delegates, or even to address the House of Delegates without special permission.

Registration on Parlor Floor of Hotel Oliver, opposite elevator. Bring your membership card with you and present to the registration clerk. If you have paid your dues to your county society secretary *only recently*, and have not yet received your membership card, present a receipt from the county secretary and you will be allowed to register. Please get your badge and wear it.

Essayists should bear in mind that their papers as presented at the South Bend Session represent copy for *THE JOURNAL*, and accordingly the title and full name and address of the essayist should appear at the top of the manuscript, and the body of the manuscript should be carefully edited. Attention to the paragraphing, punctuation, capitalization and grammatical construction of sentences will go a long way toward helping the editor and printers. All manuscripts should be typewritten.

The ladies are especially invited to attend the South Bend Session. They will be entertained with automobile rides to various points of interest in and about the city, and with a luncheon to be given at the South Bend Country Club, Thursday at 12:30 p. m. Those ladies who expect to attend the luncheon should make known the fact to the chairman of the Committee on Arrangements so that appropriate arrangements may be made.

CONDENSED PROGRAM

Wednesday, September 22

AFTERNOON

Meeting of the Council, at 4:30 p. m., Parlor A, Oliver Hotel.

EVENING

Meeting of House of Delegates, 7 o'clock, Parlor A, Oliver Hotel.

Informal smoker and get-together meeting, 8 o'clock, Rotary Club Room, Oliver Hotel.

Thursday, September 23

FORENOON

General meeting, 8:30 a. m., Rotary Club Room, Oliver Hotel.

No section meetings.

AFTERNOON

Meeting of Section on Surgery, 2 p. m., Rotary Club Room, Oliver Hotel.

Meeting of Section on Medicine, 2 p. m., Auditorium, Elks Club.

Meeting of Eye, Ear, Nose and Throat Section, 2 p. m., Parlor Elks Club.

Luncheon for visiting ladies at the South Bend Country Club, 12:30 p. m.

Automobile ride for ladies.

EVENING

General Public Meeting, Auditorium, High School, 8 p. m., addressed by Dr. Rufus I. Cole, Medical Director of Hospitals, Rockefeller Institute.

Friday, September 24

FORENOON

Meeting of Section on Surgery, 9 a. m., Rotary Club Room, Oliver Hotel.

Meeting of Section on Medicine, 9 a. m., Auditorium, Elks Club.

Meeting of Eye, Ear, Nose and Throat Section, 9 a. m., Parlor, Elks Club.

Meeting of House of Delegates, 11 a. m., Parlor A, Oliver Hotel.

AFTERNOON

Meeting of Council, at 2 p. m., Parlor A, Oliver Hotel.

General meeting, 2 p. m., Rotary Club Room, Oliver Hotel.

OFFICIAL PROGRAM OF THE ANNUAL SESSION OF THE INDIANA STATE MEDICAL ASSOCIATION

TO BE HELD AT SOUTH BEND, SEPT. 22, 23, 24, 1920

HOUSE OF DELEGATES

First meeting, Parlor A, Oliver Hotel, Wednesday evening, September 22, at 7 o'clock.

Second meeting, Parlor A, Oliver Hotel, Friday morning, September 24, at 11 o'clock.

COUNCIL

First meeting, Parlor A, Oliver Hotel, Wednesday afternoon, September 22, at 4:30 p. m.

Second meeting, Parlor A, Oliver Hotel, Friday afternoon, September 24, at 2 p. m.

Additional meetings are at the call of the President of the Council.

GENERAL MEETINGS

(ROTARY CLUB ROOM, OLIVER HOTEL)

Thursday, September 23, 8:30 a. m.

Friday, September 24, 2 p. m.

PUBLIC MEETINGS

Thursday, September 23, 8 p. m., Auditorium, High School.

SECTION ON MEDICINE

(AUDITORIUM, ELKS CLUB)

Thursday, September 23, 2 p. m.

Friday, September 24, 9 a. m.

SECTION ON SURGERY

(ROTARY CLUB ROOM, OLIVER HOTEL)

Thursday, September 23, 2 p. m.

Friday, September 24, 9 a. m.

SECTION ON EYE, EAR, NOSE AND THROAT

(PARLOR, ELKS CLUB)

Thursday, September 23, 2 p. m.

Friday, September 24, 9 a. m.

COMMERCIAL EXHIBITS

(PARLOR B, OLIVER HOTEL)

Wednesday noon to Friday night.

SCIENTIFIC EXHIBIT

(PLACE TO BE ANNOUNCED LATER)

Thursday and Friday.

REGISTRATION

(PARLOR FLOOR, OLIVER HOTEL)

Wednesday afternoon and night.

Thursday and Friday.

ENTERTAINMENT

Wednesday, September 22, 8 p. m., smoker and get-together meeting, Rotary Club Room, Oliver Hotel.

Thursday, September 23, at 12:30 p. m., luncheon for ladies at South Bend Country Club.

Thursday, September 23, automobile ride for ladies.

SCIENTIFIC PROGRAM

GENERAL MEETINGS

(ROTARY CLUB ROOM, OLIVER HOTEL)

Thursday, 8:30 to 11 a. m.

Organization.

Address of Welcome.

Address of President, Dr. Charles H. McCully, Logansport.

PAPERS

1. VIRGIL MOON, Indianapolis.

Subject: Tuberculosis of the Kidney: Pathology.

Abstract.—Development of accurate knowledge concerning renal tuberculosis. Routes of infection. Ascending infection via ureters limited in importance. Frequency of renal involvement in systemic tuberculosis. Age incidence. Experimental data. Types of involvement. Question of spontaneous healing. Extension of infection to other structures from renal focus.

2. F. B. WYNN, Indianapolis.

Subject: Tuberculosis of the Kidney: Early Recognition and Management from the Viewpoint of the Internist.

Abstract.—Let practitioners and internists take heed early of symptoms suggestive of an incipient tuberculosis of the kidney. Every available means of differential diagnosis should be employed. Once unilateral tuberculosis of the kidney is proved to exist, nephrectomy offers the surest and shortest road to recovery. Inoperable cases may be treated by the

usual measures applicable in any form of tuberculosis, quite important among which should be reckoned the cautious use of tuberculin.

3. H. O. MERTZ, Indianapolis.

Subject: Tuberculosis of the Kidney: Differential Diagnosis (Slides).

Abstract.—The discussion is based on the data derived in the laboratory and at the cystoscopic examination. While mention is made of the findings making a diagnosis of renal tuberculosis certain, most attention is given to those which, while indicating a possible or probable tuberculosis of the kidney, must be carefully studied in a differential way, both individually and as a part of the whole, before a diagnosis can be made and a rational therapeutic procedure be undertaken. The paper is illustrated by slides.

4. R. C. BEELER, Indianapolis.

Subject: Tuberculosis of the Kidney: Value of Roentgen Ray in Diagnosis.

Abstract.—The value of the roentgen ray in renal tuberculosis has just come into its own, because of new apparatus, technic and more careful study of serial plates. Roentgen-ray examinations of the entire urinary tract should always be made, and in some cases, the diagnosis is made from the roentgen ray alone. Careful preparation is one of the most important steps.

5. H. G. HAMER, Indianapolis.

Subject: Tuberculosis of the Kidney: Surgical Treatment.

Abstract.—In unilateral renal tuberculosis early nephrectomy is indicated, and it affords the only assurance of cure. Convincing evidence has not yet been produced that a cure has been effected by general measures. The involved bladder and ureter improve slowly after the removal of the source of infection.

Discussants: Charles Beall, Fort Wayne; Charles Terry, South Bend; Alfred Henry, Indianapolis; G. C. Johnson, Evansville.

Friday, 2 to 5 p. m.

1. A. M. SULLIVAN, Attica.

Subject: Public Policy and Legislation.

Abstract.—Discussion from the viewpoint of the small town practitioner. Reference to work of our Committee on Public Policy and Legislation. Functioning of State Board of Medical Examination and Registration. It has been our observation that a graduate M.D. is held in restraint or his license revoked for failure to comply with some minor requirements of our laws, which is as it should be. It has been our further observation as to illegal, unauthorized, non-educated, nongraduated, nonlicensed practitioners, such as chiropractors and other cults and isms, the State Board of Medical Examination and Registration does not functionate. Lack of team work between State Association and State Board of Health, as concerns public health work and fees therefor. The Workmen's Compensation Act and the physician. Public health insurance. The lack of hospitals in smaller towns and rural communities and its effect on the scientific development of the country practitioner. The garnishee law. The coroner's office. Necessity for expenditure of money in obtaining results in favorable legislation. Need of greater cooperation between physicians, dentists, chemists, and pharmacists.

Discussants: E. M. Shanklin, Hammond; William N. Wishard, Indianapolis.

2. M. E. BOULDEN, Frankfort.

Subject: The Acute Abdomen.

Synopsis.—(a) Anatomical boundaries; (b) anatomical regions; (c) organs in anatomical regions; (d) variations in anatomical location of organs. Pain, tenderness and muscular rigidity symptoms of acute abdominal crisis. Exceptions. Cathartics in abdominal crisis. Dangers. Case reports.

Discussants: A. C. Arnett, Lafayette; Paul Barcus, Crawfordsville.

3. WILL C. MOORE, Muncie, Ind.

Subject: Injuries of Peripheral Nerves.

Abstract.—The relative increase of peripheral nerve injury in the late war—due in part to the size of the modern bullet and also to the decrease in the number of amputations has given a new impetus to nerve surgery. Nerve injury is not uncommon in civil practice. Points in the diagnosis of nerve surgery are discussed. The different methods of spanning nerve gaps and their relative worth in the restoration of nerve conductivity are given. Prognosis of early and late operative interference. Summary of results in eleven operated cases.

Discussants: W. H. Baker, South Bend; Charles D. Humes, Indianapolis.

4. W. D. ASBURY, Terre Haute.

Subject: Mediastinal Tumor, with Report of Case.

Abstract.—General consideration of mediastinal tumor with locations and relative frequency of different varieties in anterior, middle and posterior mediastinum. *Growth and extension of tumors with symptoms in different tumors and different locations. Report of a case with history, blood finding, roentgen ray of chest, negative findings, and duration. Diagnostic procedure in the case. Inconsistencies noted. Pathologists report of necropsy. Conclusions.

Discussants: Louis Ross, Richmond; A. R. Kressler, Renesselaer.

SECTION ON MEDICINE

(AUDITORIUM, ELKS CLUB)

Thursday, 2 p. m.

1. J. E. P. HOLLAND, Bloomington.

Subject: Student Health in Indiana University.

Abstract.—Student health at Indiana University is supervised by (1) a Committee on Student Health, (2) a Department of Hygiene and Sanitation, (3) a University Isolation Hospital, and (4) a Department of the University Physician.

The Department of the University Physician was established in 1914. This appointment was prompted by the realization that the University was not meeting its full responsibilities to the citizens of the state in that the general health of its students was given but minor concern.

The Committee on Student Health supervises the inspection of rooming houses, boarding houses and matters of a general nature respecting health.

The Department of Hygiene and Sanitation conducts classes in all the phases of health care. Freshmen and Sophomore attendance is obligatory.

The University Isolation Hospital is open at all times for the care of students suffering with contagious diseases.

The University physicians are available at regular hours for the clinical care of all students, free of cost.

Over 7,000 prescriptions were given during the past year.

Ideal cooperation exists between the city and University physicians.

2. C. E. REED, Culver.

Subject: Benefits of Compulsory Military Training.

Abstract.—We accept without argument that to obtain the greatest benefit training should be compulsory as a part of the system of education for our young men. The benefits are three fold:

1. Physical Benefits: Better carriage and systematic breathing develop deep breathing, fuller lung capacity, and improved circulation and better metabolism. Regular habits of eating and sleeping, avoidance of dissipation, clear up sluggishness, and improve elimination. Medical inspection and supervision prevent or cure promptly venereal or other communicable diseases. General sanitary surroundings, enforced rules of sanitation "get into the blood" developing habits that carried back to civil life, react favorably on community life. Thorough going measures in handling accidents and disease will result in the demand for better services and less haphazard work by our lay physicians.

2. Mental Benefits: The training develops habits of alertness, accuracy and promptness in action, initiative and resourcefulness.

3. Moral Benefits: The training develops respect for constituted authority, a higher degree of self-respect, a truer respect for the rights of others, and a consequent obedience to the will of the majority.

3. O. B. NESBIT, Gary.

Subject: Malnutrition in the Schools.

Abstract.—Presents an outline of a talk that interests and instructs children. It includes prevalence in Gary, the causes, symptoms, effects and treatment.

As ignorance is chief cause, education is best method of treatment. The schools' duty is pointed out and special teaching points emphasized. Fresh-air rooms, nutritional clinics, lunch rooms and rest rooms discussed.

Charts are shown bearing on energy requirements, food values, prevalence, and results under different plans.

Discussants: W. F. King, Indianapolis; H. A. Cowing, Muncie.

4. J. O. RITCHIE, Indianapolis.

Subject: Blood Chemistry as Applied to Clinical Medicine, with Demonstration of Methods and Results.

Abstract.—Demonstration of the methods of some of the more common blood analyses. Exhibit of a few charts correlating clinical medicine and blood findings. Review of some of the more common clinical blood examinations,* with an estimation of the comparative value of each.

Discussants: G. W. McCaskey, Fort Wayne; Harry K. Langdon, Indianapolis.

5. CHESTER MARSH, New Castle.

Subject: Significance of Epilepsy, and a Consideration of Some of Its Problems of Diagnosis and Treatment.

Abstract.—The meaning of the loss of consciousness and the convulsion as seen in the epileptic. Factors, both mental and physical, which tend to produce an epileptic. Some recent methods of handling the patient.

6. W. D. VAN NUYS, New Castle.

Subject: Duty of the State in Regard to the Epileptic.

Abstract.—Epilepsy not a distinct disease. Various chronic conditions included under the term. Types committed to an institution for epileptics.

Obligations assumed by the state of Indiana on passage of the act establishing the Indiana Village for Epileptics.

Probable number of persons in Indiana eligible for admission and importance of early diagnosis and commitment to the institution.

Proposed extension work whereby the institution can reach and help epileptics not committed to its care.

Discussants: C. F. Neu, Indianapolis; Fred Terflinger, Logansport.

Friday, 9 a. m.

1. H. D. FAIR, Muncie.

Subject: "Soft Parts" as a Factor in Obstetrics.

Abstract.—Gynecologists see many women belonging to one of three groups: (1) Those having some unrepaired injury due to parturition; (2) those who were injured and the repair improperly made, and (3) those who were damaged and the repair intelligently made by an honest physician, yet the results are not satisfactory.

The study of these parts is one in architecture. (Descriptive anatomy follows):

Why do tears of the perineum occur when not expected, and why is it sometimes left intact when conditions warranted the anticipation of severe damage? Answer: anatomical peculiarity.

"Damage" suggests repair. Good results depend on, (1) recognition of the anatomic relation of the torn tissues; (2) proper suture material, and (3) simplicity in after-treatment.

More skill is required in primary than in secondary repair of the perineum. Episiotomy is a factor in the prevention of more serious damage.

Probably many cases of death from puerperal hemorrhage were due to unrecognized damage to the cervix.

Paper illustrated by seven original drawings.

Discussants: F. R. Clapp, South Bend; W. M. Stout, Newcastle.

2. WILLIAM MOORE, New Albany.

Subject: Puerperal Eclampsia.

Abstract.—1. Clinical history of disease. 2. Description of convulsions. 3. Report of cases occurring before and after labor. 4. Etiology and pathology of the disease. 5. Treatment prophylactic, palliative and curative.

Discussants: L. Parke Drayer, Fort Wayne; A. M. Mendenhall, Indianapolis.

3. C. S. BOSENBURY, South Bend.

Subject: Protein Sensitization.

Abstract.—Protein sensitization is a comprehensive term and includes food idiosyncrasy, anaphylaxis and allergy.

Proteins are widely distributed in Nature and reach the body by various routes. There are four types or classes: (1) Food proteins; (2) keratinoid proteins; (3) pollen proteins, and (4) bacterial proteins. A number of conditions, formerly attributed to different causes, may be due to the same cause, namely, the body's response to foreign protein. Bronchial asthma, recurrent bronchitis, hay fever, eczema, urticaria, anaphylactic shock, serum sickness, angioneurotic edema,

spasmodic croup and various gastro-intestinal disturbances are often due to protein sensitization.

By means of the skin test one may determine the offending protein or proteins.

Treatment consists: (1) Prophylaxis, the avoidance of offending protein, and (2) (a) withdrawal of offending protein, and (b) desensitization by ingestion or injection of offending protein in increasing doses to produce immunity.

Discussants: A. G. H. Clowes, Indianapolis; Charles Sellars, Hartford City.

4. L. D. REED, Hope.

Subject: Arthritis Deformans.

Abstract.—Definition and its status as a disease. Not a sequel to rheumatism. Causative factors are many. A secondary disease or the result of focal infection. Primary infection usually in the head, mouth or throat. The etiology of primary progressive polyarthritis does not differ. Differential diagnosis and treatment. Report of case.

Discussants: E. N. Kime, Indianapolis; C. E. Gilliland, Terre Haute.

5. J. N. MCCOY, Vincennes.

Subject: Systemic Reaction of Roentgen Ray in Treatment of Arteriosclerosis.

Abstract.—A systemic reaction follows massive roentgen-ray dose, in all cases. This consists in part of a lowered systolic pressure, the effect being temporary in patients of normal blood pressure but more or less permanent in arteriosclerotic patients. These facts were revealed incidental to treatment of deep seated cancer with massive roentgen-ray dose. The management of patients under reaction is described. Author believes neither syphilis nor alcohol to be causes of arteriosclerosis. The effects of roentgen rays and action of short-wave-length rays is discussed, including effect on active cells. Prolonged exposure is unfavorable to hemoglobin but produces increases in white and colored corpuscles. The exact causes of reduction of blood pressure are not known. Author's observation convinces him that symptomatic cure results in arteriosclerosis from roentgen rays. Cases are reported. The author believes a new field of usefulness for roentgen rays is revealed.

Discussants: Charles Grandy, Fort Wayne; Grace Line Homman, Laporte; Frank Wade, Howe.

6. GEORGE G. RICHARDSON, Van Buren.

Subject: Cholecystitis.

Abstract.—Cholecystitis is now conceded to be of an infectious nature. It is second only to the appendix in frequency, errors in diagnosis and the far-reaching mischief which it is capable of producing to other organs and tissues.

It is a medical condition only in the simple catarrhal types, and nearly always rapidly becomes wholly a surgical disease. It is perhaps the most frequently burdened with complications, numerous and serious, than any other pathology arising within the abdomen.

Early diagnosis is not only strongly emphasized, but also early surgical treatment is equally insisted on, which the author contends is the only proper and conservative method of dealing with cholecystitis, especially if accompanied with any of the many complications.

Discussants: Ben P. Weaver, Fort Wayne; C. S. Bond, Richmond.

SECTION ON SURGERY

(ROTARY CLUB ROOM, OLIVER HOTEL)

Thursday, 2 p. m.

1. IVAN C. BRENNER, Winchester.

Subject: A Consideration of the Association of Free Hydrochloric Acid and Gastric Motility in Gastric Diseases.

Abstract.—We cannot accept all statements as handed down in the past, in regard to gastric motility and gastric acidity as associated with gastric diseases. Hypersecretion and hyperacidity have long been associated with chronic duodenal ulcer. Dr. Will Mayo considers hypersecretion and hyperchlorhydria with hunger pain and food relief as diagnostic of duodenal ulcer. Report of cases showing the relationship between gastric acidity and gastric motility in chronic gastritis, acute and chronic gastric and duodenal ulcer.

Discussants: Goethe Link, Indianapolis; I. R. Knepple, Kokomo.

2. MILES F. PORTER, Fort Wayne.

Subject: Cancer of the Breast; The Present Status of the Subject with Especial Reference to Treatment.

Abstract.—Occurs in the male in less than one to 100. Scirrhus is most common form. Microscopic and clinical classifications do not always agree. The various microscopic features may be combined in some cases and fully developed case may present all of them at early period. Cancer cells in their early period present no clinical or microscopic features that are pathognomonic. Tumor is a late sign of cancer. Abnormal discharge or retraction of the nipple often the first sign. Not necessary to remove pectoral muscles and axillary lymphatics in very early stages of malignancy. Disease may occur in the young. Pregnancy and nursing contribute to the development of cancer of the breast. Tendency to cancer is transmitted by inheritance. All breast tumors should be regarded as malignant until proven benign. All potential cancers should be removed.

It is important to acquaint the public with facts concerning early cancer. Absence of axillary involvement does not preclude metastases neither does the existence of axillary nodes necessarily indicate internal metastases. Secondary operations are frequently curative. The roentgen ray is a valuable aid in determining the presence or absence of metastases. Operation usually beneficial whether cure is obtained or not. The question as to the treatment of cancer of the breast is settled in favor of removal by the knife. Roentgen-ray treatment after removal advisable but this treatment is to be proscribed until after the growth has been removed. Certain skin cancers and inoperable cases exception to this rule. There is no best plan of operation. Operation should be suited to the case in hand and certain cardinal principles applied in all operations.

Discussants: H. O. Bruggeman, Fort Wayne; Willis D. Gatch, Indianapolis; J. Rilus Eastman, Indianapolis; E. D. Clark, Indianapolis.

3. CARL HABICH, Indianapolis.

Subject: The Course of Chronic Ascending Pelvic Infections.

Abstract.—Chronic endocervicitis is a distinct clinical entity and presents the most frequently encountered objective pathology of the whole gynecologic system. Sturmdorf has very aptly called the cervix the tonsil of the uterus, as it serves when infected as a permanent focus of serious potentialities.

Above and below the internal os of the uterus we find a very striking physiologic, anatomic and pathologic contrast. The cervical canal is merely a passive passageway between the vaginal vault and the uterine cavity, and the cervical mucosa is highly susceptible to infection. On the other hand, the corporeal endometrium seldom shows evidence of chronic inflammatory change, in spite of the fact that invading organisms are constantly traveling over the surface of the corporeal endometrium in their course from the cervix to the tubes. The infrequency of chronic inflammation of the corporeal endometrium is shown by the work of Kelly, Graves, Curtis, Barbour and Watson, Norris and others. If this is true why is the corporeal endometrium immune to infection.

The attempted explanations are many and varied but none of the older ideas thoroughly and satisfactorily explain this immunity. The suggestion is offered, following the work of Dr. Arnold Sturm-dorf of New York, that these infections do not travel by continuity over the surface of the endometrium, but travel by way of the lymph channels, of which the uterus and appendages have a generous supply, as an ascending lymphangitis. This theory would explain many of the cases of amenorrhea, dysmenorrhea, menorrhagia and metrorrhagia which we have heretofore attributed to chronic endometritis. These conditions are merely functional symptoms of endocrine distortion. The so-called chronic polypoid glandular endometritis is not inflammatory in character, but is an adenomatous overgrowth analogous to the thyroid in Graves' disease. Recognizing chronic endocervicitis as a primary focus of infection and its extension as an ascending lymphangitis places it, in accord with our modern conception of bacterial invasion, on a rational parallel with any other infectious process.

Discussants: Walter J. Baker, South Bend;
H. W. McDonald, Newcastle.

4. FRANK G. JACKSON, Muncie.

Subject: Infections of the Hand.

Abstract.—Large number of permanently impaired hands found among laboring men. Taken early could be prevented. Results not due to essential gravity of case.

Diagnosis should be made early. Thorough anatomic knowledge of hand necessary to proper diagnosis and treatment.

Treatment of fascial space abscesses and tenosynovitis. Accurate diagnosis. Early incision and complete rest.

Treatment of lymphangitis—rest in bed, supportive treatment. Constant watchfulness for possible focus of pus.

Discussants: J. N. Sluss, Indianapolis; C. S. Stoltz, South Bend.

5. FRANK CROCKETT, Lafayette.

Subject: Treatment of the Prostate.

Abstract.—The lay public has not learned to come for prostatic surgery sufficiently early. As a consequence aged patients with prostatic tumor are often poor surgical risks when first seen. The problem of preoperative treatment is to make them good surgical risks. The determination of the eliminating function of the kidney is most important. Surgery is resorted to only after this has been established. Postoperative treatment is often very tedious but is second in importance only to the preoperative treatment. Irrigations of the bladder being resorted to only when called for by the local condition. All cases should be cystoscoped before being discharged to determine absence of organized clots, stone, etc. The patient's

urinary condition one year after operation is the best indication of surgical results.

Discussants: Frank Jett, Terre Haute; John C. Fleming, Elkhart.

Friday, 9 a. m.

1. LUTHER WILLIAMS, Indianapolis.

Subject: Surgery of the Gallbladder.

Abstract.—After a differential diagnosis of disease of the gallbladder from the various abdominal diseases has been made and medical treatment has failed it becomes a surgical case.

Nature of the surgical treatment should be based on the present condition of the patient taken in conjunction with the past history and the operation decided accordingly—macroscopic pathology will determine largely whether a cholecystectomy, cholecystostomy or choledochostomy should be done with indications for choice of each. Cases to illustrate.

Discussants: Charles Marvel, Richmond; William Davidson, Evansville.

2. H. H. MARTIN, Laporte.

Subject: Rupture of the Intestines.

Abstract.—I shall limit my consideration to rupture of the intestines. As a matter of general consideration I will discuss the relative frequency of this injury; for instance, in a Montreal hospital out of 1,360 surgical admissions, eight were cases of rupture of the intestines. Definite knowledge as to the pathogenesis of this condition dates back to about the year 1877 when von Lonquet showed that crushing of the bowel at the moment of the shock was by far the most frequent factor of its production. Dr. Nicholas Senn of Chicago was first to bring to the attention of the profession that, as a rule, the intestine ruptured was caught between a moving body and a fixed, rigid spinal column of the victim. While the injury may be the result of the patient's moving against a fixed object, yet the large majority will be due to the other cause; for instance, Voswinckel reports fourteen cases of rupture of the intestines, ten of which were struck by some object and four times the patient was the moving body.

The symptoms are those of an acute abdomen: (1) pain; (2) rigidity; (3) nausea and vomiting, and (4) shock. Any patient showing anyone or all of these symptoms after such an injury should be explored at once. Fatal cases are always those having been neglected. Out of four cases seen by the author, two died without surgical intervention, one received surgical intervention after the third day and died two days later. The fourth case received surgical intervention within six hours after the injury and recovery was prompt and satisfactory.

Discussants: H. A. Duemling, Fort Wayne; J. B. Berteling, South Bend.

3. BAYARD KEENEY, Shelbyville.

Subject: The Pathology of the Rectum.

Abstract.—Internal hemorrhoids, the most common pathology in the rectum, is a conglomeration of blood vessels in the submucous tissues of the lower rectum and anal canal, which becomes tortuous and whose coats have undergone partly hypertrophic and partly fibrotic change.

Anal fissure, a superficial breach of the mucous membrane, though so simple in extent and character, exercises a most potent influence in undermining health and strength. When more than one lesion is found, gonorrhea, syphilis, or cancer may be suspected. While normal papilla are scarcely visible,

hypertrophied and inflamed papilla are frequently overlooked.

Puritus ani, one of the most refractory diseases we have had to treat, reacts most encouragingly to vaccine therapy.

Fistula ani, remains of collapsed abscess, so rarely incomplete that all fistula may be safely classified as complete.

The most frequent disease of rectum and anus are probably fistula and hemorrhoids, but the most serious and by no means infrequent affections are tuberculosis, syphilis and cancer; these maladies are not rare and if not early recognized, are certainly destructive and fatal. Their recognition and differentiation is not difficult. In tuberculosis and syphilis it is very infrequently that one cannot demonstrate the causative factor. All three diseases begin as a localized lesion and while the tuberculous and syphilitic beginning is so slight, cancer is definitely seen and felt.

The glandular involvement is destructive.

There is need for more definite information concerning proctologic conditions which come so frequently unrecognized into the field of the general practitioner.

Discussants: C. B. Ruschli, Lafayette; A. B. Graham, Indianapolis.

4. JOSEPH RILUS EASTMAN, Indianapolis.

Subject: Silver Wire in Vesico-Vaginal Fistula.

Abstract.—Historical review. No suture material can match the record of silver wire in this field. The success of Sims with silver wire in negresses of the South parallels that of McDowell in pioneer abdominal surgery—both immortals in American gynecology. Attention is called to the advantages of the silver wire for the reason that some distinguished leaders of surgical scholarship and practice are advocating the abandonment of silver wire. Not a violation of a surgical maxim to use silver wire in movable tissues but rather a contravention of a surgical dogma.

Discussants: Tom Jones, Anderson; Paul Barcus, Crawfordsville.

5. GEORGE D. MARSHALL, Kokomo.

Subject: Diagnosis and Treatment of Diseases and Injuries of the Spine.

Abstract.—Data of paper will be from personal experience of the writer and that acquired by association with orthopedic surgeons that have watched the progress of orthopedic surgery for years.

Paper will deal particularly with Pott's disease, other conditions will be mentioned largely to bring out points in differential diagnosis, the plea being for the earlier and more frequent diagnosis of this condition.

Special emphasis will be made on methods of physical diagnosis.

Pott's disease is of more frequency than medical men generally believe it to be.

Causes of the frequent occurrence of Pott's disease in soldiers, change of physical habits, the army pack, etc.

Measles a cause of flaring up of tuberculous processes in the spine.

Differentiation of causes of pain in the back, that due to acute infectious diseases, trauma, neuritis, muscular insufficiency, bone lesions, subluxations, etc.

Deformity, methods of differentiating, postural, paralytic, and that due to disease of the spine, e. g., tuberculous processes.

Methods of examination, physical and roentgen ray. Previous history of the case, as for focal infections, etc.

Examination of weight-bearing structures, for effect on spine, as a cause of compensating scoliosis.

Lantern slides will be shown demonstrating methods of making braces for some of the spine lesions, showing types of braces used by the writer in Pott's disease, and subluxation of the lumbo sacral articulation.

Discussants: E. B. Mumford, Indianapolis; J. C. Fleming, Elkhart.

EYE, EAR, NOSE AND THROAT SECTION

(PARLOR, ELKS CLUB)

Thursday, 2 p. m.

1. JOHN R. NEWCOMB, Indianapolis.

Chairman's Address.

2. C. H. McCASKEY, Indianapolis.

Subject: Syphilis as a Factor in Deafness.

Abstract.—Syphilis is one of the most frequent diseases. Occurs congenitally and by acquisition. Attacks both receptive and perceptive areas of the hearing apparatus. Pathologic processes. Perceptive apparatus most frequently involved. Congenital type more common in children, acquired in adults. Value of various functional tests in diagnosis. Early diagnosis essential. Treatment limited.

Discussant: George W. Spohn, Elkhart.

3. B. R. KIRKLIN, Muncie.

Subject: Roentgen-Ray Diagnosis of Mastoid Pathology.

Abstract.—Importance of roentgen-ray methods in studying conditions of mastoids cannot be overestimated.

Two essentials necessary to make roentgen-ray methods of any value, viz.: (1) Proper technic in making plates, and (2) the correct interpretation of the plates by a trained roentgenologist.

Technic used is modification of Pirie's technic and taking both mastoids on single pair of stereoscopic plates.

In general, mastoids fall into three different types for study, viz.: (1) Rudimentary, or infantile type having practically no mastoid cells; (2) a type presenting more extensive area of cellular structure situated entirely behind and below antrum, and (3) extensive pneumatic type with larger cellular area extending into the zygoma, far back and down into the tip.

Roentgen-ray methods of invaluable importance in showing: (1) Which type of mastoid is present; (2) location and size of lateral sinus; (3) acute or chronic mastoiditis; (4) extent of bone necrosis and destruction present if any; (5) incomplete operation with some cells left causing stubborn convalescence.

Lantern slides showing roentgenograms of various types of mastoid pathology.

Discussant: W. F. Clevenger, Indianapolis.

4. G. H. MUNDT, Chicago.

Subject: The Indications for Operation in Acute Mastoid Disease.

Abstract.—The complications of mastoiditis will not be considered. An effort will be made to present definitely when in an acute otitis media the mastoid should be opened. The symptoms will be discussed in relation to the pathologic condition causing them. The value and interpretation of the roentgenogram of the mastoid process will be considered.

Discussant: W. S. Tomlin, Indianapolis.

5. J. O. STILLSON, Indianapolis.

Subject: Reminiscences of Ophthalmology.

No abstract.

Friday, 9 a. m.

1. A. R. SIMON, Laporte.

Subject: Surgical Treatment of Acute Tonsillitis.

Abstract.—Articles on indications for removal of tonsils do not mention acute tonsillitis as an indication. Tonsillectomy would be the ideal treatment if the fear of complications following this operation could be eliminated. Review of the literature shows a mortality of one-fifth of 1 per cent. for tonsillectomy in well-selected cases. Records of tonsillectomy during the acute stage show a mortality of slightly less than 1 per cent. No records are available regarding the mortality from acute tonsillitis and its complications. Personal inquiry among laryngologists and internists shows the sentiment to be strongly in favor of delaying operation until the acute symptoms have subsided. The writer's experience in doing tonsillectomy at the very onset of acute tonsillitis has been very favorable. As broader experience is recorded along this line, there will be a modification of the present antagonism to surgery in acute tonsillitis cases.

Discussant: D. O. Kearby, Indianapolis.

2. C. J. ADAMS, Kokomo.

Subject: Penetrating Eye Injuries.

Abstract.—I believe the following methods of procedure which I have selected from the rich fund of ophthalmologic experience as rational and practical measures should be consistently followed in all penetrating eye injuries:

(1) A complete history should be obtained from the patient as soon after the accident as possible.

(2) A careful external examination of the eye and wound should be made as a guide to further operative procedure and, particularly, in order to establish a diagnosis between contusion and perforation.

(3) Next an ophthalmoscopic examination is in order, if the media are clear. Valuable knowledge can be obtained by using this procedure as a routine measure.

(4) A complete roentgen-ray examination of the eye should be made, preferably by the Sweet method, if there be the slightest suspicion that the eye contains a F.B. This should be done by a radiographer whose training and experience with the Sweet method qualifies him to make a definite diagnosis.

(5) If an intra-ocular F.B. is discovered and its removal is not fraught with difficulty it should be removed at once. The route selected should be the shortest distance between the F.B. and the outside of the globe regardless of the location of the wound entrance and a method used which will result in a minimum of trauma and a saving of all possible vision.

(6) In the event the F.B. is magnetizable the type of the magnet should be chosen only after a careful consideration of all details with full regard to expediency of extraction.

(7) The wound should be repaired by stitching the sclera and the cornea if necessary, if there is a prolapse or a threatened prolapse of any of the intra-ocular structures and conjunctival flaps should always be used covering the full extent of the wound.

(8) A subconjunctival injection of a weak solution of either mercury cyanid or oxycyanid should be used following the repair of the penetrating injury.

(9) The use of White's ointment and iced compresses following the operation should be routine measures.

(10) The decision, as to whether the eye is allowed to remain or is enucleated in order to avoid sympathetic ophthalmia, should be made not later than two

weeks following the injury after full consideration is given to the information you obtain from a complete examination. In case of doubt it is wise to remove the injured eye. It is far better to have one eyeball with good vision than two eyeballs and no vision.

Discussant: W. A. Hollis, Hartford City.

3. K. T. BROWN, Muncie.

Subject: Submucous Resection of the Nasal Septum.

Abstract.—Deflections are placed in three classes, namely, simple, slight and extensive.

Simple deflections are those deflections in which there is only a small amount of interference.

Slight deflections are those deflections in which the deflections are more pronounced, and in which there is at all times an interference with drainage, and this class is usually confined to one side.

Extensive deflections are those cases in which there is complete closure and interference with drainage and respiration of one or both sides, and it is usually both sides in this class.

In the first class operate only when other means have failed. In the second and third class operation is always indicated where there is interference with drainage and respiration, as there will be in these classes and especially if associated with chronic inflammation of the accessory sinuses, diseases of the pharynx and certain middle ear affections.

Discussant: E. J. Lent, South Bend.

4. ALBERT E. BULSON, JR., Fort Wayne.

Subject: Simple Glaucoma: Its Early Recognition and Treatment.

Abstract.—Experience indicates that simple glaucoma oftentimes is not recognized sufficiently early. This failure is due to the patient's freedom from pain, inflammation and disturbance of central vision. Impairment of sight after correcting lenses have been prescribed is sometimes assigned to amblyopia or other causes not associated with the increased tension. The tendency to ignore ophthalmoscopic examination in refraction cases is condemned. Early cupping of the disc should be recognized, as also restriction of the field of vision. A partially dilated pupil, even though active, in a patient past middle age, should always be considered suspicious. It should not be forgotten that simple glaucoma sometimes occurs in young adults. The more frequent use of the tonometer and the perimeter is urged. Myotic treatment in the early recognized cases is preferable to operative interference.

Discussant: Joel Whitaker, Indianapolis.

REPORT OF COMMITTEE ON MEDICAL DEFENSE

House of Delegates, Indiana State Medical Association:

Gentlemen: The following cases were pending on August 1, 1920, against the different members of the Association, and the status of each is about as follows:

1. Shepherd v. Dr. Corbin. Sullivan Circuit Court. Hunt & Gamble employed by Ft. Wayne Medical Protective Co. to defend. Set for trial three different occasions and continued by plaintiff. (Still pending.)

2. Uland v. Funk & Edwards. Originated Knox Circuit Court, venued to Sullivan Circuit Court. (Pending.) Trial by jury. Finding for plaintiff in sum of \$2,000, pending on motion for new trial.

3. Sarah Tyler v. Dr. Funk. Knox Circuit Court. (Pending.) The committee appointed by you reports no merit in the case, and Dr. Funk advises he will not compromise.

4. Reardon v. Dr. Yung. Vigo Circuit Court. (Pending on motion to make complaint more specific.)

5. Some one v. Dr. Johnson of Richmond. No notice of any suit filed has been received.

6. Clark v. Dr. Maurer. Venued from Grant Circuit Court to Delaware Superior Court. Dr. Maurer was informed we would assist in defense. I have asked to be advised when set for trial, but attorneys say that in their judgment it will not come to trial.

7. Crawford v. Peters. Defended by Wolf & Barnes, employed by defendant. Request made to assist, and I have been in correspondence with that firm. (The case is still pending.) Dr. Maurer has gone to California to recuperate health.

8. Manne v. Dr. Fletcher, Sunman, Indiana. Application for assistance in defense received. (Case pending.)

9. Price v. Kaadt. Set for trial at Ft. Wayne. We appeared but the case was continued. On December 15, 1919, case was settled and complete releases signed by plaintiff and cause dismissed.

10. Laurent v. Dr. Wilcox. Laporte Circuit Court. (Pending.) We obtained the information at the Industrial Board, after suggesting the possibilities thereof to the attorneys for Dr. Wilcox, that this man had been receiving compensation through the Industrial Board, and suggested that this be plead in answer, or rather plea, and the matter is still pending.

11. Gray v. Dr. McGowan. Gibson Circuit Court. Have conferred personally with attorneys employed, and motion filed to make more specific and still pending on that motion.

12. H. Karl Volland v. Dr. Marshall. Bartholomew Circuit Court. Pending on motion to make complaint more specific and strike out. (Pending.)

13. Robert F. Volland by next friend v. Dr. Marshall. Bartholomew Circuit Court. Action by boy for his injuries venued to Johnson County. Trial by jury and finding for defendant.

14. Dukollil v. Ferres. Lake Superior Court. Assault and battery. (Pending.)

15. Strieder v. Dr. McBride. Allen Circuit Court. (Pending.) We have had a great deal of efforts to locate this man's army record, and the last I knew of it the attorneys were attempting to locate this in the War Department. This information came May 21.

16. Some one v. Dr. Wilhelmus. Warrick Circuit Court. Application for defense came on the eve of trial and I communicated with the doctor, offering assistance if he would make the proper application, but before response came the case was terminated in his favor and he paid his attorneys for services.

17. Cullen vs. Drs. Barnhill and Coble. Marion Superior Court. (Pending.) On the absence of Dr. Coble, on order of court, Dr. Coble having died, case is ended as to him but pending as to Barnhill.

18. State of Indiana v. VanBysterveld. Warrick Circuit Court. Made preparation for trial which was sent for January 19 and on January 17, late in the afternoon, defendant appeared and pleaded guilty.

19. Adam Folgeman v. Dr. John Kerrigan, Sr. La Porte Circuit Court. Copy of complaint received. No application for defense received.

20. Rebecca Brown v. Frederick E. Hammond. Orange Circuit Court. Set for trial for December, 1919, but continued.

21. Margaret Hefner v. Dr. Prather. Knox Circuit Court. Pending. In charge of Kessinger & Hill.

22. Amos Nokes v. Dr. Leonard, Indianapolis, Ind. Threatened suit but none filed.

23. Sipe vs. Dr. Reusser et al. Pending in Allen Circuit Court. Set for trial June 1, 1920, and continued because of inability of other attorneys in case to attend.

24. Willbur Garrett v. Dr. H. J. Weil of Indianapolis. Pending in Marion County Superior Court. Trial date not set. Will not be reached for some time.

25. Adolphus Carryot v. Clem L. Blue of Tocsin. Pending in Wells County Circuit Court. Will not be reached for several months.

26. ——— (name not reported) v. Dr. Kathryn M. Whitten of Ft. Wayne. Pending in Allen County Court. Small amount involved.

27. ——— v. Dr. W. P. Ford et al. of Boonville. Pending in Warrick Circuit Court. Will not be reached soon.

In addition to looking after the defense of every member of the Association in good standing and who presented the necessary application, your committee has been in communication with the American Medical Association on numerous medical legal matters.

FINANCIAL REPORT, MEDICAL DEFENSE COMMITTEE

Balance on hand at last published report,	
January 1, 1920 (cash)	\$2,930.99
Fourth Liberty Loan Bonds	5,000.00

DISBURSEMENTS

Salary Mr. Schortemeier, attorney, February to July, inclusive	\$ 750.00
Stenographer	7.00
Price v. Kaadt.....	37.00
Balance August 24, 1920 (cash).....	\$2,136.99
Bonds	5,000.00

Respectfully submitted,

GEO. R. DANIELS, Chairman.
F. B. WYNN.
E. M. SHANKLIN.

REPORT OF COMMITTEE ON MEDICAL EDUCATION

House of Delegates, Indiana State Medical Association:

Gentlemen: As delegates to the annual meeting of the Council on Medical Education of the American Medical Association and the meeting of the Association of the American Medical Council, permit me to report that the meetings this year were of the usual constructive character.

The usual review of the status of medical schools was made. The number fluctuates but slightly now. The chief feature of the meetings was a discussion of the time devoted to, and methods of presentation of each of the subjects of the first two years of medicine. The distribution of time in the better medical schools is practically unchanged. The coming year a like program and discussion will be arranged for the last two years of medicine.

The question of premedical requirements received its usual share of attention with the adoption of the following minimum requirements in the sciences:

Chemistry, twelve semester hours, four of which must be organic chemistry. Effective from Jan. 1, 1920.

Physics, eight semester hours, including at least two semester hours of laboratory work. This minimum cannot be modified by having taken high school physics. Effective from Jan. 1, 1921.

Biology, eight semester hours. This requirement may be satisfied by vertebrate and invertebrate zoology, by four hours zoology and four hours of botany; but not by botany alone. Effective Jan. 1, 1920.

In addition to the science requirements, English, six semester hours, is required, and enough additional work to make a total of sixty semester hours or two full years of collegiate work.

It should be noted that many neighboring schools are building, or preparing to build, very extensively. The state of Indiana will have to adopt a liberal building program for its medical school in order to continue to furnish the opportunity for medical instruction which the student body of the state merits.

BURTON D. MYERS, Chairman.

REPORT OF COMMITTEE ON INDUSTRIAL AND CIVIC RELATIONS

House of Delegates, Indiana State Medical Association:

Gentlemen: Your Committee on Industrial and Civic Relations wishes to report the following:

It was found when the committee took up this work that we were rather late in the field as compared to other states. Other states had active committees at this time. On taking up the matter with the different states, it was found that they were devoting all their time to the question of State Health Insurance and State Medicine. These committees were holding the matter open at the time, taking the viewpoint that if State Medicine or Medical Health Insurance would be a good thing for the general public, it would be right for the medical profession to concur even at a personal sacrifice.

Since that time, several committees have gone on record, also several states, and the American Medical Association at its last session went on record in this matter, and several county societies in the state of Indiana have gone on record as opposed to either Medical Health Insurance or State Medicine. They take the view that it would be neither good for the general public nor the medical profession. Your committee has collected data from those thought to be authority on the subject together with all written matter, which can be used at any future time when it is called for.

This took so much time that the committee did not hold a regular meeting, and when the American Medical Association passed on the matter, it was not considered necessary by your chairman to call a meeting of this committee. I think it can be recommended that the Indiana State Medical Association go on record as concurring and endorsing the report passed by the American Medical Association at its last meeting.

There are various other very important matters that can be taken up by the next committee on this subject.

FRANK H. JETT,
Chairman, Committee on Industrial and Civic Relations.

REPORT OF COMMITTEE ON HOSPITAL STANDARDIZATION

House of Delegates, Indiana State Medical Association:

Gentlemen: The report of your committee on Hospital Standardization is herewith respectfully submitted.

It embodies the facts of the hospital survey of the state, presented to the Council on Medical Education and Hospitals of the American Medical Association, Feb. 2, 1920.

Eighty hospitals were investigated by your committee; of these seventy were personally inspected. Of the total, eight hospitals were rated in Class A, or Class B plus, forty-seven in Class B; nineteen in Class C and six below C, in accordance with the standard of qualifications suggested by the Council on Medical Education of the American Medical Association.

Thirteen hospitals expressed a desire to use interns; sixty-seven hospitals expressed no such want.

The appended letter from the Council on Medical Education and Hospitals of the American Medical Association summarizes well the work of your committee for the year and gives a comparison of the work of similar committees of other state medical associations:

DR. ALBERT E. STERNE, Indianapolis, Ind.

Dear Dr. Sterne: Your letter of July 23 has been received and in reply we are glad to say that the plan to have the hospital committees made permanent was proposed to all of the state associations in May, 1920. Our suggestion to the state associations at that time was that it might be well to have the committees appointed so that the term of office of one member would expire each year and also to make provision for the prompt filling of all vacancies that might occur. Dr. Charles N. Combs, secretary of the Indiana State Medical Association, in reply, said that the Indiana committee is serving its second year, that it is such an excellent committee that there is no intention of making a change but that at the next annual session you would propose a plan of a three years tenure with one change each year.

So far as the Council on Medical Education and Hospitals is concerned, the work of the present committee has been highly satisfactory and we have evidence that the work of the committee is having a good effect on the hospital situation of the state of Indiana.

A few points regarding the work of your committee by way of comparison might be of interest to you. Your main report covered 80 hospitals, 70 of which were inspected by members of the committee or persons directed to make the inspection. You rated 8 hospitals in Class A, 47 in Class B, 19 in Class C and 6 below C. Stated in percentages, 10 per cent. were rated in Class A, 59 per cent. in Class B, and 24 per cent. in Class C. An interesting point is the comparison of these percentages with the percentages for all the state committees over the entire country, which shows 26 per cent. of the hospitals rated in Class A, 36 per cent. in Class B, 26 per cent. in Class C and 12 per cent. below Class C. It is readily seen that your committee placed an unusually large percentage in Class B. The verdict of your committee in this respect, however, is pretty well corroborated by reports from the hospitals themselves, reports of the inspectors, reports of ex-interns and other sources of information.

In addition to the main report which you sent us on February 2, we have been gratified to have supplemental reports on several hospitals, one or two of which have been recently raised to Class A, evidently because of recent improvements which were instituted in the hospital following the first survey by your committee.

Reports received from state committees over the entire country have now covered more than 1,800 hospitals and reports on these hospitals are based on inspection in 47 per cent. of the cases. In this respect also your committee compares favorably with the average of the entire country, inasmuch as you inspected 88 per cent. of those hospitals on which you rendered a report.

Please accept from the Council for your committee our appreciation for the work already begun and accomplished, and the earnest hope that the committee will be made permanent. Yours sincerely,

COUNCIL ON MEDICAL EDUCATION AND HOSPITALS,
Per H. F. SANGER.

The total expenses of the survey, not including any per diem allowance to the members of the committee for time actually spent in this work, is as follows:

Dr. J. H. Weinstein, Terre Haute, Ind.....	\$23.57
Dr. F. F. Spink, Washington, Ind.....	40.00
Dr. George D. Miller, Logansport, Ind.....	63.00
Dr. Albert E. Sterne, Indianapolis.....	26.00
Dr. E. J. Lent, South Bend, no report submitted.	
Dr. W. H. Stemm, North Vernon, no expense account submitted.	

Permit me to call your attention to the fact that the annual report with its recommendations to the House of Delegates, submitted last year, still requires final action. The recommendations then made are respectfully resubmitted.

A. E. STERNE, Chairman.
W. H. STEMME.
J. H. WEINSTEIN.
F. F. SPINK.
GEORGE D. MILLER.
E. J. LENT.

REPORT OF COMMITTEE ON SCIENTIFIC EXHIBIT

House of Delegates, Indiana State Medical Association:

Gentlemen: The committee has arranged for a scientific exhibit for the state meeting at South Bend, September 22, 23 and 24, to consist of a roentgen-ray plate exhibit illustrating various aspects of radiology and loaned by several radiologists. Plastic surgery of the face exhibit by Dr. H. A. Duemling of Fort Wayne. Pathologic material from the Indiana University School of Medicine.

Negotiations being under way for the acquisition of further material.

MILES F. PORTER, JR., Chairman.
NORMAN E. JOBES.
B. VAN SWEARINGEN.

REPORT OF COMMITTEE ON NECROLOGY

House of Delegates, Indiana State Medical Association:

Gentlemen: From Aug. 1, 1919, to July 31, 1920, ninety-four physicians of Indiana have passed away

by death. Their names and date of death have been properly recorded in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

G. W. H. KEMPER, Chairman.

REPORT OF SECRETARY

House of Delegates, Indiana State Medical Association:

Gentlemen: For the first eight months of the fiscal year 1920, I beg to make the following report: The numerical strength of the Association is now 2,446, which equals the total membership for 1919 and leaves us the remaining four months in which to make an increase. In another column in this issue of THE JOURNAL, you will note a large number of our counties which are entitled to the credit for maintaining the Association's membership.

The Council, early this year, voted to continue the practice of remitting the dues for those of our members who are still in the service, and the following represents the list that has been furnished us by the different county secretaries:

O. W. Grisier, Whitley County.
Ben Pence, Whitley County.
J. W. Duckworth, Marion County.
H. W. Miller, Marion County.
F. N. Shipp, Marion County.
C. D. Holmes, Marion County.
E. K. Schurtz, DeKalb County.
L. F. Robinson, Marion County.
R. S. Wood, Knox County.
F. F. Hutchins, Marion County.
M. H. Kutch, Vigo County.
S. A. Quimby, Marion County.
J. T. Lankford, Marion County.
J. L. McElroy, Marion County.

This list is published, as it may be that there are other former members who were still in the service Feb. 1, 1920, and are, therefore, entitled to have their dues remitted so that they will remain in continuous good standing. If any member knows of such an instance, we shall be glad to have the name.

The Secretary wishes to acknowledge the receipt of copies of the early transactions of the Association from Dr. G. W. H. Kemper of Muncie. These cover the years 1849 and 1859 to 1869, inclusively. Dr. Kemper also donated a number of copies of his index to the complete transactions, and I note that he has indexed also the years 1850 to 1858, inclusive, and 1870 to 1872, inclusive, none of which transactions are in the possession of the secretary. Since purchasing the fireproof safe, I have endeavored to complete the files so that they will be preserved for future reference, and, after ten years of effort, still find a number of copies unobtainable, although I understand that a complete set is in the Indianapolis City Library.

The councilors were asked to make a report to be printed in THE JOURNAL, but so far only the following have been received:

First District.—Dr. Welborn.—Visited Posey and Spencer Counties. District meeting in May. Societies better than they were two years ago.

Fifth District.—Dr. Rice.—No district meeting. No county societies visited yet this year.

Eighth District.—Dr. Kemper.—On account of illness unable to visit any societies this year. Asks to

be relieved as councilor on account of continued ill health.

Ninth District.—Dr. Moffit.—Good district meeting last spring. On account of ill health, unable to visit any county societies this year, and will ask to be relieved from duty.

Tenth District.—Dr. Shanklin.—County societies in good condition and good district meeting. Every county visited except Laporte.

Eleventh District.—Dr. Eckhart.—Counties visited. Grant, Huntington, Wabash and Carroll. Unusually fine district meeting.

Twelfth District.—Dr. Morgan.—Visited Allen, Wells and Whitley Counties. All doing well and having regular meetings.

Respectfully submitted,

CHARLES N. COMBS, Secretary.

REPORT OF TREASURER

RECEIPTS

Balance at last printed report, Jan. 1, 1920	\$2,018.78
2,446 members (14 in service, dues remitted)	9,728.00
	<hr/> \$11,746.78

EXPENDITURES

Journal at \$1.....	\$2,446.00
Balance on Executive Secretary's office, Indianapolis, until closed, Feb. 1, 1920.....	344.35
Crating and storage of Indianapolis office furniture	68.90
Secretary's stenographer	358.00
Legislative committee	19.50
Secretary's postage and incidental expenses	67.75
Printing	14.53
	<hr/> \$ 3,319.03

Balance on hand Aug. 24, 1920.....\$ 8,427.75

Respectfully submitted,

CHARLES N. COMBS, Secretary-Treasurer.

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

House of Delegates, Indiana State Medical Association:

Gentlemen: At the Ft. Wayne meeting of this Association several years ago, a resolution was adopted by the House of Delegates directing the Committee on Public Policy and Legislation to use all possible efforts to secure the appointment of a representative member of this society on the State Board of Medical Registration and Examination in the place of a member of that board who had recently been appointed to succeed George W. Webster of Lafayette, Indiana, who had so long and acceptably served on this important board. It has heretofore been the custom for the governor to appoint one representative from each of the several schools of medicine represented on the board who was recommended by and approved by the different medical organizations of the state. Governor Marshall, who had made the unfortunate appointment, expressed his sincere regret at having overlooked the recommendation of the Indiana State Medical Association made through its committee, and said he would call his successor's attention to it and do all he could to correct the error. He told the chairman of your committee that he had done this

at the close of his term. His successor, Governor Ralston, declined to follow Governor Marshall's recommendation and also ignored the recommendation made to him by your committee. He was fully informed of the facts and also of the recommendation of the Indiana State Medical Association in this connection. Your committee called his attention to the fact that the man who had been appointed by Governor Marshall was not regarded as a fit representative of the Indiana State Medical Association on this educational board. His private secretary resided in the same town in which the appointee lived, and it was noticed by your committee that he was present at the different conferences with the governor and seemed to take a decided interest in the matter. Whether his interest was exerted in behalf of the appointee or not your committee does not know, but it does know that Governor Ralston stubbornly refused to give the Indiana State Medical Association a member on this important board who was acceptable to and recommended by this organization. It is the opinion of the chairman of this committee that the medical profession owes Governor Ralston nothing, and we would recommend that his action in this matter be borne in mind by the medical profession of the State of Indiana. His successor, Governor Goodrich, did fair during the first three years of his administration to follow the example unwisely set by Governor Ralston. Your committee has called upon Governor Goodrich repeatedly and received promises from time to time that he would not reappoint the objectionable member. He has, however, allowed his term to continue until recently. However, your committee is very glad indeed to give him credit for his final action, and to heartily commend the appointment he has made. Dr. W. R. Davidson of Evansville, Indiana, has recently been appointed to the place on the State Medical Board to which this society is entitled. It is a matter of congratulation that the error has been finally corrected.

It has been the custom for the governor to appoint one member of the regular medical profession of his own selection who is not necessarily recommended by this organization. Dr. J. M. Dinnen of Ft. Wayne, who has long rendered excellent service on the board, was originally appointed as the personal representative of Governor Mount. Dr. E. M. Shanklin of Hammond, Indiana, a man of high standing and active in this organization, and whose name was on the list with Dr. Davidson and several others who were recommended to the governor as fitted for the place, was appointed. The Indiana State Medical Association now has two of its most prominent members on the State Board of Medical Registration and Examination.

Your committee appeals to the members of this organization to give the board its hearty and cordial support in meeting the many perplexing problems that are presented. It should be borne in mind that the work of the State Medical Board is chiefly educational. Its work is comparable to that of the State Board of Education which has charge of the licensing of teachers for the public schools. Under the constitution of Indiana violations of the medical law come under the head of police regulations and therefore their prosecution is in the hands of the local authorities in each county. It is not the function of the State Medical Board to prosecute violators of the law in the different counties of the state, but it cordially cooperates to the extent of its funds and ability. En-

forcement of the medical law rests with the county prosecutor in each county, and very largely with the medical profession. Local medical organizations should recognize this and enforce the law through their prosecutors, and not complain of failure of the State Medical Board to do what is not delegated to it by the law.

At the last session of the legislature, a bill was introduced providing for annual registration and a payment of the small sum of \$2. This would have been sufficient to enable the state board to actively cooperate with the different county organizations and county prosecutors in enforcing the law. Strange as it may seem, there was opposition from some of our own members who did not care to go to the trouble of registering annually and paying this small registration fee, as is required and done in many other states. Enforcement of the medical law cannot be shifted to the State Medical Board unless you provide it with a fund sufficient to secure enforcement of the law.

It is a matter of regret that the work of your committee has been considerably crippled by the discontinuance of the executive office at Indianapolis. One of the particular functions of this office has been to keep in close touch with the political situation throughout the state. As a result of the condition which now confronts us, attention is called to the fact that the Republicans have nominated a chiropractor for the legislature in Allen County, and the Democrats are said to have nominated a Christian Scientist in DeKalb County who is running against the Honorable Herbert C. Willis of Waterloo, who has heretofore been a member of the legislature and has been a strong friend of the medical profession. It has heretofore been possible usually to avoid such unfortunate nominations by the activities of the executive office, and the interest it has been able to arouse in the different counties where bad nominations were threatened. It is hoped that in the two counties above mentioned, the medical profession will unite to defeat the objectionable nominees. In this connection, it is desirable to emphasize again the fact that the medical profession in every county in the state should take active interest in the selection of members of the legislature and should support only men who are known to favor higher medical education and will favor progressive legislation to that end regardless of their political affiliations. Owing to the discontinuance of the executive office, it has been very difficult, indeed, thus far to arouse sufficient interest on the part of different county medical societies and the medical profession at large in the state.

Your committee again appeals to each member of the Indiana State Medical Association to make an individual effort to secure a pledge from the nominees on both tickets for the legislature that they will support only those laws that are approved by the medical profession of the State of Indiana and that they will oppose any effort to lower the high educational standard that has finally been established. It is hoped that some bill similar to that introduced at the last session of the legislature for registering physicians will be presented to the next legislature and that it will receive the cordial support of the medical profession. It should include annual or at least bi-annual registration. It is impossible for the state board to keep in touch with those who have registered years ago unless a periodical record is made. Many physicians have died or moved away and new ones have

taken their places. Unless periodical registration is maintained, the activities of the board are greatly crippled. In addition, a small registration fee would enable the board to cooperate actively and efficiently with county organizations in prosecuting violators of the law.

The evolution of medical education and of medical legislation should go hand in hand, and we have ourselves to blame if we do not support progressive medical legislation.

Respectfully submitted,

WM. N. WISHARD, Chairman.

THE *Journal of the American Medical Association*, in commenting on the hospital intern problem, says that it is certain that the increased demand for interns does not justify either the lowering of educational standards or the multiplication of medical schools. A good suggestion is made that hospitals should employ physicians on salaries and delegate to orderlies a certain part of the routine unskilled work which now is done by interns. There is also a crying need for stenographers in most hospitals to take down records and do away with the endless waste of the intern's time caused by the necessity of filling in records and reports.

Most people would imagine that the condemnation of harmful luxuries by doctors would happen most frequently in the office with rich patients, but surgeons attached to large industries could tell that neither fines nor thought of others seem able to eradicate the love of finery. Three cases of finger or hand crushing have happened recently in laundries owing to rings being worn. The law decrees that all flatiron workers must be equipped with guards in front of the feed rolls to prevent the hands of feeders from being drawn into the rollers, and ringed fingers were found especially dangerous, yet nothing seems able to instill the idea of self-preservation at the small cost of giving up some finery in work hours. It is not only the girls but the men who sometimes put adornment before safety. Do they realize—just to give one instance—that the rim of a circular saw is moving at the rate of 1 to 2 miles a minute? Perhaps not, but the printed warnings against wearing rings or gloves are before their eyes. All the same, smashed fingers and hands appear with horrible frequency, and the public blames the employer for what in reality was contributory negligence on the part of the worker—*New York Medical Journal*, July 24, 1920.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

SEPTEMBER 15, 1920

EDITORIALS

OUR PRESIDENT

Charles Harvey McCully, President of the Indiana State Medical Association, was born in Idaville, White County, Ind., March 28, 1868. As a boy he clerked in country stores and served as "devil" in a country print shop. His early education was received through private tutorage and in the public and normal schools. He taught school for six years, after which he took up the study of medicine, graduating from the Eclectic Medical Institute of Cincinnati, in 1893, and from the Medical College of Indiana in 1897. Postgraduate study was pursued later at the University of Chattanooga and at the Rockefeller Institute. His first years in the practice of medicine were spent at Burnettsville, Ind., but in 1905 he removed to Logansport where he has continued to reside and practice. In 1909 he was married to Miss Florence Vernon of Huntington, and to this union was born one son, James Dixon, now 7 years old.

Dr. McCully always has been active in medical affairs in Indiana, having served as the first president of the Eleventh Councilor District Medical Association, president of the White County Medical Society and Cass County Medical Society, councilor of the Eleventh District, delegate to the American Medical Association, and vice president of the Indiana State Medical Association. In addition to this he has been a member of the Cass County Board of Children's Guardians for the past fifteen years, was active in securing the present law of medical examination and registration, and has written several monographs on "Sanitation and Disinfection," and "The Chemistry of Embalming." In politics, Dr. McCully is a Republican. He is a member of the Presbyterian Church, and a member of the Logansport Kiwanis Club. During the world war he served as member of the local Registration Board, Conscription Board, and State Section of the National Committee of Medical Defense. Later he was commissioned captain in the Medical Corps, and served at Camp Greenleaf, New York City, and in the base hospital at Camp Lee.

As previously stated, Dr. McCully always has been active in medical affairs of the state. His services and influence in the Indiana State Medical Association has been of the constructive type and in making him president the Association has not only expressed its appreciation and esteem, but has brought honor to itself.

CHRONIC APPENDICITIS

Individuals with a long history of vague and varying abdominal symptoms are frequently told that their symptoms are due to a chronically infected appendix, are subsequently operated, usually with more or less transient benefit, and the surgeon adds another case to his list of "successful" results. And yet within a few months the general practitioner or internist is again appealed to for relief from the very symptoms supposedly justifying the appendectomy!

The appendix is investigated in the course of most laparotomies and rarely escapes mention in the list of pathologic findings recorded. Routine radiologic examinations of the gastrointestinal tract show abnormal appendices to be the rule, whether associated with other inflammatory lesions or not. And an appendectomy is practically unattended by risk! What wonder that "chronic appendicitis operation advised" is so popular. No one will question the advisability of appendectomy in chronic recurrent appendicitis with history of attacks indicating acute exacerbations of a chronic process—whether accompanied by abdominal symptoms in the intervals or not. The term "chronic appendicitis" should not include these cases.

Rest in bed, a carefully regulated diet, more than usual care of bowel elimination, and the postoperative care every patient gets or gives himself will relieve *temporarily*, most of the vague abdominal symptoms ascribed to "chronic appendicitis" whether operation is done or not.

A careful study of the end results in these cases is convincing evidence that, whereas chronic appendicitis occurs frequently, it is much less commonly the cause of the symptoms for which relief is sought. Other abdominal lesions often associated with these chronic appendices may be the cause and it may even be granted that the latter play an important etiologic part. The fact remains that their removal is not sufficiently satisfactory to warrant the procedures in many or most of the cases. In a recent article a well known and very able surgeon frankly concedes that his experience based on over 500 operated cases has been decidedly unsatisfactory—a conclusion in which general practitioners will heartily concur.

FEES IN INDUSTRIAL CASES

For the most part the Industrial Board, acting on the claims of physicians in industrial cases that come under the jurisdiction of the Workmen's Compensation Law, has acted with fairness and reasonable liberality. In fact, the board has been given considerable leeway in making adjustments, and an effort has been made to fix settlements so that they are entirely in keeping with all of the facts pertaining to the case.

The trouble encountered by physicians who are doing industrial work has been that they oftentimes have to wrangle with an insurance company in effecting settlement for professional services rendered. Those companies that have a desire and a tendency to squeeze a dollar until it squeals, attempt by brow-beating methods to make physicians settle bills for professional services rendered in industrial cases at fees that are ridiculously low, and always in accordance with the schedule adopted by the Industrial Board. Very naturally, the schedule adopted was very low at the time it was adopted, and of course it is ridiculously low at the present time. Furthermore, it was a schedule which applied to average services and average services only. Then there is a provision in the law providing that insurance companies shall not be held responsible for medical or surgical attention given after the thirty-day period. This is a rank injustice to all concerned, but it is especially hard on the members of the medical profession, as they really are morally obligated to continue caring for the case until it is ready to be discharged if it requires thirty days or 300 days.

In the end, figure it as you will, the medical profession is made the "goat," and all the high-flown oratory concerning the beauties of the Workmen's Compensation Law comes to naught when we remember that in reality the medical profession is the one that is imposed on in a most shameless manner, and all for the sole purpose of feathering the nests of the insurance companies rather than helping the poor unfortunate industrial worker who is injured.

At the present time there is a crying need for a readjustment of the schedule adopted by the Industrial Board so that the minimum fees allowed physicians in industrial cases shall be in keeping with the present tendency of the times. There also should be some plan adopted whereby fees shall have some relationship to the character of the services rendered. It is manifestly absurd to expect all subsequent after-attention, including dressings, to be paid

for at the rate of \$1 each when physicians are regularly receiving from \$2 to \$3 for the same service from industrial workers who are private patients, as it also is equally unfair to expect the expert specialist to render highly technical services, and such services as only can be rendered by one that has been especially trained, and award him the fees that are granted the merest tyro in the profession. It also is the rankest kind of injustice to make any law or rule which relieves employers or insurance companies from paying for professional services beyond the thirty-day period. These are some of the questions which our committee on Industrial and Civic Relations can well afford to wrestle with and concerning which recommendation should be offered to our state medical association.

OBJECTION TO MEDICAL SOCIETY DUES

We recently have heard from a county medical society secretary in Indiana who says that two or three well-to-do doctors in his county resigned from the local medical society when the dues were raised to \$5, and have steadfastly refused to reaffiliate with their professional brethren ever since. It seems remarkably strange to us that any member of the regular medical profession can have the nerve to object to the payment of \$5 a year toward the support of an organization that is absolutely necessary for the perpetuation of the traditions and present position of the medical profession as a whole. Purely selfish interests alone should encourage the medical man to associate himself with the state medical association, and pay any assessment that may be asked when he knows that the money so paid will be for his own as well as the general good of the profession. The medical defense feature of our Association alone is worth double what membership costs, and we believe that every member of the Association will admit that *THE JOURNAL* is worth the membership fee.

One of the reasons why we never have been able to accomplish all that should be accomplished in the way of protective medical legislation and the suppression of incompetents and quacks, has been because doctors do not hold together, and many of them are forever complaining about an insignificant expense which must be assessed on the individual members in order to keep up the organization. Even the chiropractors pay from \$10 to \$15 a year membership dues, and they cheerfully subscribe from

\$10 to \$100 each toward a legislative fund for the purpose of paying expenses in securing the legislation that is favorable to them.

Certainly the members of the regular medical profession ought to adopt a new spirit of liberality toward the support of their medical societies, and just now there is every reason why they should "cut the belt" and donate to a fund to be used in promoting the right kind of medical legislation, and they are "cheap skates" if they go at it in a niggardly fashion.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THE TIME—Wednesday, Thursday and Friday, Sept. 22, 23 and 24, 1920.

THE PLACE—South Bend, Ind.

THE EVENT—The Annual Session of the Indiana State Medical Association.

LET us pray for good weather the week of the South Bend Session. A large number of members have signified their intention of going to South Bend by automobile, and a drive in the rain at the best would be unpleasant.

GOVERNOR GOODRICH long has signified his intention of reorganizing the Board of Medical Registration and Examination. He finally has cut loose from the cut and dried habit of preceding governors by not only refusing to reappoint some of the old members of the board but he actually has asked some of them to resign.

WITH many members of the Association away on vacations and others careless or indifferent concerning their obligations, it has been a difficult undertaking for us to secure all of the needed information for a satisfactory writeup of the South Bend Session. However, after

many trials and tribulations we are able to offer a rather satisfactory announcement which can be depended on by the readers of THE JOURNAL.

THE members of the regular medical profession of Indiana will be pleased to know that at last they are represented on the Board of Medical Registration and Examination by two very reputable and high class regular physicians who have the unqualified indorsement of the whole profession. Probably it would have been impossible for Governor Goodrich to have appointed two more acceptable men than Drs. W. R. Davidson of Evansville and E. M. Shanklin of Hammond.

THOSE who expect to go to South Bend by automobile may obtain some valuable information concerning routes and road conditions by inquiring at the offices of the Lincoln Highway or the Yellowstone Trail. Such offices are maintained in most of the large cities, and we know that representatives can be found in Indianapolis and Fort Wayne. Perfectly reliable information, but perhaps not quite so up-to-date concerning detours, may be obtained by consulting the well known automobile Blue Book.

WE have been hearing considerable about the dearth of physicians, and some physicians formerly connected with medical schools that were put out of business because inferior in quality are now harping about the limited number of medical schools and the demand for more doctors to take care of the people. As a matter of fact there is no civilized country that has more doctors for each hundred of population than the United States, and despite the fact that there are fewer medical schools and consequently fewer doctors graduated during the last few years, there is still no scarcity of physicians, and it is not likely that there will be for some time to come. What we really need is not more doctors but better doctors, and the medical schools of the country today are aiming to fill this need.

THE *Journal of the American Medical Association* calls attention to the fact that the prodigal expenditure of money which is customary today has brought forth a demand for not only better medical service but evidence of more and better equipment in the possession of physicians. The working class of people, who now revel in silk stockings and silk shirts, are demanding well-equipped and inviting offices of their physicians in response

to an increasing taste for luxuries. This reminds us that many times we have called attention to the dirty, slovenly-looking offices of many doctors, and wondered why patients who are accustomed to cleanliness and order could be expected to go into such places. There is no excuse for having an uninviting office, and cleanliness, orderliness, punctuality and common courtesy go a long way toward adding to the doctor's success.

YE GODS! what will the dyspeptics do for an alibi now that pie, the great American desert, has been pronounced thoroughly digestible and less objectionable as an article of diet than many other things that never have been placed under the ban. The lovers of pie will be pleased to know that the gastro-enterologists at the Jefferson College, of Philadelphia, have come to the defense of pie. This may come as a shock to those wisecracks who have been forever sounding a note of warning concerning the indigestibility of pie, and probably is quite as much a shock as the exploded theory that it is very harmful to drink fluids with the meals. In fact it is now considered quite the proper thing to take water with the meals, which some so-called dietary experts have been prone to tell us was harmful to digestion. In reality there is altogether too much advice advanced without having it based on facts or suitable foundation.

Now that the complexion of the Board of Medical Registration and Examination has been changed, let us hope for some real action in enforcing the medical practice act as it pertains to the protection of the people, and in reality all medical laws are for the protection of the people and not for the benefit of or the protection of the members of the medical profession. Heretofore there has been too much of a tendency to persecute rather than prosecute, and many a competent, well-trained, and reputable physician has been made to feel the strong arm of the board, oftentimes to the end that he has been prevented from practicing medicine in the state of Indiana, whereas a horde of incompetents and medical pretenders have been allowed to practice medicine unmolested. We are strong for the action suggested by one member of the Board of Medical Registration and Examination who, in an article in *THE JOURNAL*, made the statement that "all doctors who desire to practice medicine in the state of Indiana should be tarred with the same stick." There is absolutely no reason why the board should make fish of one and bait of another.

THE Bethlehem Laboratories have been circularizing physicians in various parts of the country with a stock-selling scheme. Circular states that the Bethlehem Laboratories "control the manufacture of Hyclorite," and that Hyclorite "has been accepted by the Council on Pharmacy and Chemistry of the American Medical Association." They offer the "favored" physicians a three-day option to purchase four shares of their 8 per cent. accumulative preferred stock for \$400. The American Medical Association, in commenting on this matter, states that it knows nothing about the Bethlehem Laboratories, or whether there is any truth in the claim that this concern "controls the manufacture of Hyclorite." This product was accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies because at the time it was considered, it was marketed in accordance with the Council's rules. As for the investment proposition which the Bethlehem Laboratories, Inc., makes to physicians, it is an insult to decent medical men. Furthermore, it is against public interest and a degradation of scientific medicine for physicians to be financially interested in the products they prescribe.

WE have a notion that our Association's Committee on Industrial and Civic Relations has not a very clear conception of its duties and the need for active work. At the present time there is much agitation detrimental to the best interests of the medical profession which sooner or later will be crystallized into definite action that it will take strenuous efforts to overcome. Compulsory health insurance is but the stepping stone to state medicine, and if the individual members of the medical profession are not to be railroaded out of a job they will have to reckon with the tendencies of the times and act accordingly. With a united front the members of the medical profession can accomplish almost anything, and they certainly can prevent objectionable legislation, but if they continue to be inactive and adopt the policy of "let George do it" there is bound to be a day of reckoning and it may be a bitter one for some. The injustices practiced by insurance companies in connection with claims which come under the jurisdiction of the Workmen's Compensation Law, and the known tendency of life insurance companies to demand and receive about \$25 worth of services for \$2 in real money are some of the things that can be well taken into consideration by our Committee on Industrial and Civic Relations.

THE medical men in Iowa for the most part have raised their fees to a point where some objection is made by the daily press. In Des Moines, for instance, the doctors have joined in the demand for \$5 for every day visit, and all of their other fees are increased in proportion. While we confess that \$5 for all ordinary visits seems a little steep, and may be prohibitive to working people and especially those on a salary, yet we are inclined to believe that many people will be willing to pay such fees if they receive real services, and this means not only thorough and skilful attention but avoidance of all unnecessary visits. We are under the impression that the medical men of Des Moines are just as charitable as any other class of people, and that they will continue to render gratuitous services to the worthy poor and to reduce regular fees to all those who are deserving of such consideration. Yet we are reminded that some of the candidates for the legislature already are proposing to advocate for the state of Iowa some form of state medicine to relieve the people of what has been termed "profiteering on the part of the medical profession." The outcome will be watched with considerable interest, and we believe that the medical men of Iowa will be sufficiently interested to take an active hand in formulating any legislation that infringes on or limits their individual activities.

THE average doctor is a "tightwad." He objects to paying out money for anything that is of direct benefit to him in his professional work, though he does not hesitate to buy stock in oil wells or gold mines that is sold to him on the promise of fabulous returns but which in reality never materialize. He kicks on the size of his medical society dues and because he is expected to pay the dues promptly. He is rather careless and indifferent about obligations of every kind and usually gets the reputation of being "poor pay." He is quite as careless in the collection of accounts that are owing him, and in consequence feels that he is not open to as much censure for failure to maintain his own credit. He does not properly equip his office, and does not see any necessity for having good furniture and an inviting place to which his patients can come, and sometimes, unless he has a wife who punches him up a little, he is indifferent concerning his personal appearance. He objects to the employment of competent help to do the things that can be done by others and with a great saving of his own time which can be given to more profitable employment. In conse-

quence of all of this he complains because he does not get along, and he looks enviously on those who are more prosperous than he is and who really accomplish more than he does.

In reality there are many routine procedures connected with the practice of medicine, and especially in connection with an office practice, which can well be done by lay persons with a great saving of time and effort for the doctor who should be able to devote more time to things more important and especially those things which never can be done by lay persons. The taking of case histories, blood pressure, temperature, pulse rate and getting samples for laboratory examination can be just as well done by a lay person as by the physician himself. Much of the laboratory work can be done by a lay person under the supervision of the physician, and the same is true of ordinary local treatments and dressings. The work should be checked up by or done under the supervision of the physician, but there is no earthly reason why the average busy doctor should waste his time on unimportant routine work which can be done by any bright office assistant and oftentimes better than it would be done by the physician himself. Everyone now days is aiming at efficiency, and in all lines of human endeavor we hear much about systematization. How much does the average doctor practice the ordinary rules of efficiency, and how much does he study systematization in the conduct of his work? Certainly it is time for him to take an inventory and begin following the tendencies of the times by spending a little money for necessary equipment and salaries of a few lay assistants.

DEATHS

MRS. AGNES CHRISTIE, Indianapolis, wife of Dr. J. P. Christie, died August 5.

MRS. CATHERINE R. MOORE, age 75, widow of the late Dr. Henry Moore, died July 23 at the home of her son at Rockville.

BENJAMIN M. SHERWOOD, M.D., aged 64 years, a pioneer of Linton, died in the St. Vincent hospital, Indianapolis, July 22.

HORACE V. NORVELL, M.D., Bloomfield, died July 10 at the home of his son in Minneapolis where he had spent the past year. He was 81 years of age.

JOHN A. BLAND, M.D., Edinburg, died August 12, aged 82 years. He was graduated from the Cincinnati College of Medicine and Surgery in 1865.

ARTHUR B. LOCKRIDGE, M.D., Danville, Illinois, died August 2, aged 41 years. He was graduated from the School of Medicine of Purdue University in 1906.

THOMAS ADELOTTE, M.D., Lyons, died recently, aged 82 years. He was graduated from the University of Louisville, Medical Department, in 1888, and had been a practicing physician for 55 years.

SAMUEL B. LEWIS, M.D., died August 16 at his home at West Fork, aged 80 years. He was graduated from the Cincinnati College of Medicine and Surgery in 1862 and served as a major in the medical corps in the Civil War.

WILLIAM E. STUCKMEYER, M.D., Indianapolis, died August 22, aged 38 years. Death was due to cardiac failure. He was graduated from the School of Medicine of Purdue University in 1906 and was a member of the Marion County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. R. O. KENNEDY has removed from Milroy to Rushville for the practice of medicine.

DR. HERMAN W. SMELSER, Connersville, is in Chicago taking postgraduate work in medicine.

THE Decatur County Hospital is the recipient of a gift of \$50,000 from the estate of Nelson Mowrey.

DR. F. S. CUTIBERT has moved to Kokomo where he will specialize in eye, ear, nose and throat work.

DR. BROSE HORNE, Gas City, has gone to New York where he will take a special course of study in internal medicine.

PROF. ABAME POLITZER, the noted otologist of the University of Vienna, died on Thursday, August 12, in his eighty-fifth year.

DR. J. E. MOSER, Bloomington, has just returned from New York where he has been taking a special course in diseases of children and surgery.

DR. JAMES J. MOORHEAD, surgeon and worker in research, formerly of Chicago, is now surgeon-in-chief to St. Anthony's Hospital, Terre Haute.

DR. JOHN G. SCIFRES, Indianapolis, was married on July 4 and since that time has been enjoying an extensive honeymoon in the southern and western states.

DR. ALEXANDER R. CRAIG, secretary of the American Medical Association, was operated August 4 for cholelithiasis. According to last reports his condition is favorable.

THE Wayne County Tuberculosis Hospital, south of Richmond, is to have improvements amounting to \$25,000, which amount has been appropriated by the county council.

The family of Dr. D. W. Layman, Indianapolis, occupied a cottage at Burt Lake, Michigan, during the summer, Dr. Layman spending two weeks of July and two weeks of August there.

RECORDS of the Health Department show that in Indianapolis 4,150 births were recorded during the first seven months of this year. This is 864 more births than during the same period last year.

DR. ERNEST E. PARKER and Miss Mary Frances Kennedy were married July 25 at St. Patrick's Church in Oxford. They will reside in Oxford where Dr. Parker is a practicing physician.

A NEW home for nurses of the City Hospital to cost approximately \$500,000, having a capacity to accommodate about 300 nurses, is being contemplated by the city board of health of Indianapolis.

CAPT. WILLIS W. CAREY of Ft. Wayne has received an honorable discharge from the United States Army after serving nearly two years, and has returned to his home and resumed practice.

DR. FREDERICK V. OVERMAN and Dr. Robert E. Repass have become associated in the practice of diseases and surgery of the ear, nose and throat, with offices in the Hume-Mansur Building, Indianapolis.

THE Whitley County Medical Society held their regular meeting at Columbia City August 3. The meeting was addressed by Dr. C. P. Emerson, dean of Indiana University School of Medicine, Indianapolis.

CAMBRIDGE UNIVERSITY has conferred the honorary degree of Doctor of Laws on Dr. John Jacob Abel, professor of pharmacology at Johns Hopkins Medical School, and Dr. Harvey Cushing, professor of surgery at Harvard Medical School.

COL. WESTON P. CHAMBERLAIN, M. C., U. S. Army, has been appointed a member of the United States Interdepartmental Social Hygiene Board, succeeding Col. Percy M. Ashburn, M. C., U. S. Army, who has been ordered to a field command.

THE New York City Health Department is the recipient of a gift of \$80,000 from the Board of Estimate for the purpose of preventing the invasion of cholera, bubonic plague, smallpox and typhus, which are now ravaging sections of Europe.

SIR ROBERT JONES has been awarded the Cameron prize of the University of Edinburgh in recognition of the highly important advances he has made in orthopedics and his many valuable contributions to the literature of the subject during the past five years.

THE Public Health Service has been considering the transfer of the leprosarium at St. Gabriels, Miss., to government control. It has been approved as a site for such an institution, but its capacity will have to be increased if it is taken over by the government.

A NEW wing is being constructed at the Methodist Hospital, Indianapolis, at an approximate cost of \$300,000. It has a capacity of seventy-two rooms, nurses' laboratories and diet kitchens. The new wing is modern in every respect and is a fireproof structure.

MISS ANITA MUHL, Indianapolis, made the highest grade in the class taking the examination of the state board of medical registration

and examination. She will become an interne at the St. Vincent's Hospital in September, and will be the first woman interne at the hospital.

DR. CHARLES LANDFAIR, Bluffton, whose license as a physician was taken from him fifteen years ago, after he had been convicted of crime and sent to the state penitentiary, was reinstated August 6 as a practicing physician, when he was granted a license by the state medical board.

TEACHERS are to be required to weigh and measure each pupil under their care at the beginning of the school year in Indianapolis city schools. About 10 per cent. of the school children have been found to be underweight and it is with a view of correcting this situation that these examinations are to be made.

A FREE clinic for the relief of sufferers from hay fever has been established at the city dispensary, Indianapolis. The clinic is being conducted by the ear, nose and throat department of the Indiana University School of Medicine and is open only to those patients who are not able to pay for proper medical treatment.

BETWEEN forty-five and fifty of the Civil War veterans who are in the mental ward at the Marion branch of the National Military Home are to be transferred to the southern branch at Hampton, Virginia, where arrangements have been made and facilities provided to give special treatment and care to veterans of this class.

A MEDICAL journal is now published entitled *Harefoosh* (medicine) in Palestine, being the first medical journal published there. Medical work in Palestine has been greatly stimulated during the past two years by the physicians and nurses of the American Zionist Medical Unit, who have taught the native members of the profession modern methods.

MANY cases diagnosed as tuberculosis have on further examination showed signs of hookworm, and under treatment for hookworm have improved greatly, according to reports from army medical men at General Hospital No. 19 at Oteen, N. C., where tuberculosis patients are treated. It is estimated that about 10 per cent. of the patients suffer from hookworm at the time of admission and that about 2 per cent. do not have tuberculosis.

THE fees collected at the City Hospital, Indianapolis, from the government for disabled soldiers, from patients who received money under the workmen's compensation law, and from private citizens who do not desire to be considered charity patients were increased 380 per cent. during the first six months in 1920 over the same period in 1918, due to the system carried out by the private secretary of the superintendent of the institution.

A CHILDREN'S hospital is to be established in Indianapolis where children from the unsanitary tenement district will have a chance to become strong and healthy again. The hospital is to be operated the year around and will be be equipped with play grounds for the summer and indoor sports for the winter. Though there is a children's ward at the City Hospital, this is the first children's hospital to be organized in the state.

DURING August the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Armour & Co.: Corpus Luteum Tablets-Armour 5 grains.

Diarsenol Co.: Sodium Diarsenol 0.15 gm. ampules; Sodium Diarsenol 0.3 gm. ampules; Sodium Diarsenol 0.45 gm. ampules; Sodium Diarsenol 0.6 gm. ampules; Sodium Diarsenol 0.75 gm. ampules; Sodium Diarsenol 0.9 gm. ampules.

GOVERNOR GOODRICH has appointed three new members and reappointed one old member of the state board of medical registration and examination. The governor named Dr. Paul Tindall of Greensburg to succeed Dr. M. S. Canfield of Frankfort; Dr. William R. Davidson of Evansville to succeed Dr. L. G. Smelser of Shirely, and Dr. Eldredge M. Shanklin of Hammond to succeed Dr. J. F. Dinnen of Fort Wayne. He reappointed Dr. William T. Gott of Crawfordsville, who has been serving as secretary to the board.

DRUNKENNESS and serious crimes have increased in the Nation's capital during the past fiscal year in spite of a decided decrease in the number of arrests and minor crimes, according to the annual report of the superintendent of police for Washington, D. C. Judging by this report and other apparently authentic information, many firms and individuals are manufacturing beverage concoctions under the guise of medicine for the sole purpose of avoiding the

federal laws. A recommendation restricting the sale of such articles probably will be included in the superintendent's formal report, so he states.

THE names of twelve medical men are among the ninety-one nominations for this year's elections to the Hall Fame. The best judges of their eligibility are certainly the members of their own profession. With this in mind, the Nujol Laboratories of the Standard Oil Company (New Jersey), are taking a vote of all physicians in the United States on the twelve nominations which have already been made to the Hall of Fame. The results of this election will be turned over to the electors of the Hall of Fame, and it is hoped that this vote will be of material assistance to the electors, and possibly result in the election of a physician or surgeon.

THE annual meeting of the American Child Hygiene Association is to be held at St. Louis on October 11, 12 and 13. Some of the interesting discussions on the preliminary program are: "The Problem of the Expectant Mother in Rural Communities," Dr. Foster S. Kellogg, Boston; "The Problems and Treatment of Early Dental Defects," Dr. Thomas D. McCleave, Berkeley; "The Mental Health of the Child," Dr. C. Edgerton Carter, Los Angeles; "Standards and Methods for Health Work Among Children of Preschool Age; Methods of Publicity in Health Education," Miss Sally Locas Jean, New York; "Economy of Preventive Measures in the Nutrition of School Children; Prevalence and Management of Tuberculosis in Infancy," Dr. Theodore C. Hempelmann, St. Louis.

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County	Secretary	Date
1.	Decatur,	C. R. Bird.....	Feb. 1, 1920
2.	Fayette,	R. H. Elliott.....	Feb. 1, 1920
3.	Franklin,	E. M. Glaser.....	Feb. 1, 1920
4.	Fulton,	A. E. Stinson.....	Feb. 1, 1920
5.	Jasper-Newton,	O. E. Glick.....	Feb. 1, 1920
6.	Jefferson,	O. A. Turner.....	Feb. 1, 1920
7.	Marshall,	Harry Knott.....	Feb. 1, 1920
8.	Posey,	John Ranes.....	Feb. 1, 1920
9.	Shelby,	F. E. Bass.....	Feb. 1, 1920
10.	Sullivan,	J. B. Maple.....	Feb. 1, 1920
11.	Union,	J. D. Shonwald.....	Feb. 1, 1920
12.	Warrick,	J. F. Samples.....	Feb. 1, 1920
13.	Washington,	Claude B. Paynter.....	Feb. 1, 1920
14.	Wells,	G. B. Morris.....	Feb. 1, 1920
15.	Whitley,	H. M. Egoft.....	Feb. 1, 1920
16.	Delaware-Blackford,	H. D. Fair.....	March 1, 1920

17. Hancock, C. H. Bruner.....	March 1, 1920
18. Knox, D. H. Richards.....	March 1, 1920
19. Madison, Doris Meister.....	March 1, 1920
20. Monroe, J. E. P. Holland.....	March 1, 1920
21. Scott, J. P. Wilson.....	March 1, 1920
22. White, H. B. Gable.....	March 1, 1920
23. Marion, Leslie H. Maxwell.....	April 1, 1920
24. St. Joseph, R. B. Dugdale.....	April 1, 1920
25. LaGrange, A. J. Hostetler.....	April 1, 1920
26. Miami, M. L. Wagner.....	April 1, 1920
27. Steuben, Mary Ritter.....	April 1, 1920
28. Tippecanoe, W. M. Reser.....	April 1, 1920
29. Wabash, L. O. Sholty.....	April 1, 1920
30. Fountain-Warren, A. M. Sullivan....	May 1, 1920
31. Henry, W. H. Stafford.....	May 1, 1920
32. Jay, C. A. Paddock.....	May 1, 1920
33. Montgomery, A. L. Loop.....	May 1, 1920
34. Vanderburgh, William E. Barnes....	May 1, 1920
35. Bartholomew, H. H. Kamman.....	June 1, 1920
36. Dearborn-Ohio, E. J. Libbert.....	June 1, 1920
37. Huntington, F. B. Morgan.....	June 1, 1920
38. Vigo, W. D. Asbury.....	June 1, 1920
39. Clarke,	July 1, 1920
40. Clinton	July 1, 1920
41. Kosciusko	Sept. 1, 1920

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1920, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

STERILE SOLUTION OF LUTEIN—H. W. D.—Each cubic centimeter contains the water-soluble extract of 0.2 Gm. lutein-H. W. D., freed of protein in physiological solution of sodium chloride. For a discussion of the actions and uses of ovary preparations, see New and Nonofficial Remedies, 1920, p. 201. The solution is supplied in the form of Ampules Sterile Solution of Lutein-H. W. D., containing 1 Cc. Hynson, Westcott & Dunning, Baltimore.

OVARIAN RESIDUE—H. W. D.—The residue from the fresh ovary of the hog, after the ablation of the corpus luteum. Ovarian Residue is used for the same conditions as the entire ovarian substance, but is claimed to have the advantage of being somewhat more stable. Ovarian Residue-H. W. D. is supplied in the form of 5 grain tablets only. Hynson, Westcott & Dunning, Baltimore (*Jour. A. M. A.*, Aug. 7, 1920, p. 378).

BENZYL BENZOATE-SEYDEL—A brand of benzyl benzoate complying with the tests and standards of New and Nonofficial Remedies. For a discussion of the actions, uses and dosage of benzyl benzoate, see New and Nonofficial Remedies, 1920, p. 48. Seydel Manufacturing Company, Jersey City, N. J.

TABLETS ANTERIOR PITUITARY-ARMOUR 5 GRAINS.—Each tablet contains 5 grains of desiccated pituitary substance (anterior lobe Armour (See New and Nonofficial Remedies, 1920, p. 207). Armour & Co., Chicago.

TABLETS OVARIAN SUBSTANCE-ARMOUR 5 GRAINS.—Each tablet contains 5 grains of Ovarian Substance-Armour (See New and Nonofficial Remedies, 1920, p. 202). Armour & Co., Chicago.

RIODINE.—A 66 per cent. solution in oil of an iodine addition (See Iodin Compounds for Internal Use, New and Nonofficial Remedies, 1920, p. 143). Riodine is supplied only in the form of Riodine Capsules 0.2 Gm. E. Fougera & Co., Inc., New York (*Jour. A. M. A.*, Aug. 14, 1920, p. 477).

PROPAGANDA FOR REFORM

DIGITALIS THERAPY.—Thanks to the development of appropriate methods of physiologic assay, digitalis preparations can now be evaluated in terms of their real potency, and products can be prepared which are stable and constant as the pharmacopeial standards demand. Physicians have learned, largely through the leadership of Cary Eggleston, how to estimate digitalis dosage on the basis of body weight. As the possibility of overdosage can be recognized by the occurrence of symptoms such as nausea, or by the electro-cardiograph, it becomes possible to push the dosage speedily to the limit of tolerance, with corresponding therapeutic advantage. There remains, however, the important need of differentiating more clearly the patients for whom digitalis is actually indicate (*Jour. A. M. A.*, Aug. 7, 1920, p. 417).

INTERNAL AND EXTERNAL ANTISEPSIS.—Despite the numerous efforts to demonstrate the efficacy of this or that chemical agent or drug as a gastro-intestinal antiseptic, the outcome has been that the supposed benefits were due to catharsis in most instances rather than to any real effect upon the bacteria in situ. Similarly, J. F. Norton, in an investigation made for the Council on Pharmacy and Chemistry, has shown that the value of "antiseptic" and "germicide" soap depends on the soap and not on the antiseptic or germicide contained in them. In fact, ordinary toilet soap and the green soap used by surgeons was more efficient, evidently because the added antiseptics and germicides interfered with the lathering qualities of the soap (*Jour. A. M. A.*, Aug. 14, 1920, p. 478).

THE BETHLEHEM LABORATORIES, INC., PREFERRED STOCK.—Physicians in various parts of the country have received advice that they have been selected to share in the profits of the Bethlehem Laboratories, Inc., New York City. The company claims to control the manufacture of hyclorite, a product accepted by the Council on Pharmacy and Chemistry. These physicians are given an option to purchase four shares of the company's stock for \$400. The directorate of the Bethlehem Laboratories, Inc., is stated to be composed of business men of Bethlehem, Pa., the president of the General Laboratories, Madison, Wis., a "prominent physician" of Bethlehem, and J. Jay Reilly, Philadelphia, a "prominent Philadelphia surgeon and consulting chemist to several large manufacturing drug concerns." Hyclorite, manufactured by the General Laboratories, Madison, Wis., was accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies because at the time it was considered it was marketed in accordance with the Council's rules. The investment proposition which the Bethlehem Laboratories makes to physicians is an insult to decent medical men. When physicians are interested in products they prescribe or recommend, the public does not get a square deal. It is against public interest and a degradation of scientific medicine for physicians to be financially interested in the products they prescribe (*Jour. A. M. A.*, Aug. 14, 1920, p. 493).

QUININ AND UREA HYDROCHLORID FOR LOCAL ANESTHESIA.—Quinin is a protoplasmic poison and tissue necrosis may be caused by strong solutions of quinin salts. That this deleterious reaction actually does occur and has mitigated against the general use of quinin and urea hydrochlorid is confirmed by the report of the Committee of the A. M. A. on the Advantages and Disadvantages of Local Anesthesia in Nose and Throat Work. The committee reported that the only local anesthetic that produces edema and sloughing is quinin and urea hydrochlorid. The committee found that, as this local anesthetic has been abandoned in other fields of medicine, so it has been discarded for use in nose and throat operations. Two physicians who had published articles extolling the value of quinin and urea hydrochlorid in nose and

throat operations now state that they have discontinued its use, though they had not published this unfavorable conclusion (*Jour. A. M. A.*, Aug. 21, 1920, p. 559).

VALUE OF SCHICK TEST.—The Schick test, which can readily be applied to a large number of persons, makes it possible to differentiate those immune from those susceptible to diphtheria. It also facilitates the attempt to increase the number of the immune by suitable prophylactic toxin-antitoxin injections. By the use of the Schick test and toxin-antitoxin injections, institutions have been kept free from cases of diphtheria for years (*Jour. A. M. A.*, Aug. 21, 1920, p. 545).

SUKRO-SERUM AND APHLEGMATOL.—About two years ago, American newspapers contained accounts of an alleged cure for pulmonary tuberculosis "discovered" by Prof. Domenico Lo Monaco of Rome, Italy. Reports indicated that this so-called Italian Sugar Cure for Consumption consisted of the intramuscular injection of solutions of sucrose (saccharose—cane sugar). Now the Council on Pharmacy and Chemistry reports on two proprietary preparations based on the "sugar cure" which are being exploited in this country: Sukro-Serum and Aphlegmatol. Sukro-Serum is marketed by the Anglo-French Drug Company. A circular issued by this company described Sukro-Serum as a "STERILIZED SOLUTION OF lacto-glucos-SACCHAROSE." By reading this circular to the end, however, one learns that "Sukro-Serum" is not a "serum" in the ordinary sense, but apparently it is a solution of ordinary sugar (sucrose). Aphlegmatol is sold by G. Giambalvo & Co. The circular enclosed with a package of this preparation contains the following, with reference to the composition: "A solution of Hydrats of Carbon after the formula of Professor D. Lo Monaco, Director of the Institut of Physiological Chemistry of the University of Rome. Contents: *Sucrose* ($C_{12}H_{22}O_{11}$) *Glucose and Galactose* ($C_6H_{12}O_6$). The preparation was found to contain a reducing substance, probably glucose, amounting to about 7.4 per cent. After hydrolysis, 55.5 per cent. of glucose was found. The advertising for Aphlegmatol appears to be the work of those ignorant of the English language. These two preparations appear to be nothing more than concentrated solutions of sugar. It is probable that a small amount of cane sugar might be inverted into glucose and fructose, but experiments have shown that cane sugar subcutaneously administered in the small amounts used in this instance is largely excreted in the urine unchanged. Less is known about galactose, but the evidence available would indicate that galactose is largely excreted in the urine unchanged when given subcutaneously. Glucose would be absorbed as such, and the amounts under consideration, used by the system much the same as when given by mouth (*Jour. A. M. A.*, Aug. 21, 1920, p. 556).

MORE MISBRANDED NOSTRUMS AND DRUG PRODUCTS.—The following products have been the subject of prosecution by the federal authorities under the Food and Drugs Act: Tonic Remedy, a nostrum of the alcoholic type was misbranded because the label failed to show the quantity or proportion of alcohol present. Big G, said to be "A Compound of Borated Golden-seal," was essentially a watery solution of boric acid and berberin. Plantation Sarsaparilla consisted essentially of potassium iodid, alcohol, plant material, sugar and water. Magic Eye Salve consisted essentially of zinc oxid, benzoic acid and petrolatum. Femenina consisted essentially of alcohol, sugar, water and unidentified material with indications of valerian. Balsam Copaiba, Salol Compound, and Methylene Blue Compound (The Evans Drug Mfg. Co.), were capsules which were below standard in strength and purity. Pabst's Okay Specific consisted essentially of volatile and fixed oils, plant extractives, including cubebs, balsam of capaiba and buchu, and

more than 29 per cent. of alcohol. Liebig's Diarrhoea Cordial consisted essentially of a solution of morphin sulphate, catechu, tannin, oil of cassia, oil of peppermint, sugar, alcohol and water (*Jour. A. M. A.*, Aug. 28, 1920, p. 623).

SILVER SALVARSAN.—According to a report of the Medical Research Committee of Great Britain, silver salvarsan is apparently a molecular combination of arsphenamine and silver in some form. The substance is on trial, and its promiscuous use at this time would be ill advised. In the United States no license for the sale of silver salvarsan has been granted by the Treasury Department and hence it may not be sold in interstate commerce (*Jour. A. M. A.*, Aug. 28, 1920, p. 626).

IODEX AND LIQUID IODEX.—The A. M. A. Chemical Laboratory examined Iodex in 1915 and found that it contained only traces of free iodine, though claimed to contain "5 per cent. therapeutically free iodine." Even the total quantity of iodine was shown to be only about one half of the 5 per cent. claimed to be present as free iodine. An analysis of the Iodex sold in 1919 demonstrated that the preparation is essentially the same as that sold in 1915, that is, it was found to contain no free iodine and only about three fifths of the total amount of iodine claimed. The laboratory points out that the synonym used for Iodex, "Ung. Iodi, M. and J." is in obvious conflict with the Food and Drugs Act in that, though sold under a name recognized in the U. S. Pharmacopeia, it does not conform to the standards for Ung. Iodi, of the pharmacopeia. The laboratory further reports that Liquid Iodex, sold with the claim that it is a preparation having the properties of free iodine, is a reddish liquid with an odor like oleic acid, containing but little (0.16 per cent. (free iodine and only about three fifths of the total iodine claimed (Reports of the A. M. A. Chem. Lab., 1919, p. 104).

I. G. O.—According to Dr. H. S. Lambdin, Peru, Kansas, I. G. O. is: saturated solution of iodine gas in petrolatum at 130 degrees with oil of eucalyptus. The heat of the body liberates the iodine and it is absorbed as free iodine. The A. M. A. Chemical Laboratory reports that the sample of I. G. O. was a black ointment, green in thin layers, with a slight odor like crude petroleum, containing but 0.59 per cent. of free iodine (Reports of the A. M. A. Chem. Lab., 1919, p. 106).

BOOK REVIEWS

SYPHILIS: A TREATISE ON ETIOLOGY, PATHOLOGY, DIAGNOSIS, PROGNOSIS, PROPHYLAXIS AND TREATMENT. By Henry H. Hazen, A.B., M.D., Professor of Dermatology and Syphilology, Medical Department of Georgetown University; Professor of Dermatology and Syphilology, Medical Department of Howard University; Member of American Dermatological Association and National Association for Control of Syphilis; Visiting Dermatologist and Syphilologist to Georgetown University Hospital, Freedmen's Hospital, Washington Asylum Hospital, and Woman's Evening Clinic; Author of "Diseases of the Skin," "Cancer of the Skin," etc. Illustrated. Cloth. Price, \$6. Pp. 647. St. Louis: C. V. Mosby Company, 1919.

Any recent work on this subject must needs be interesting indeed but Dr. Hazen has made his book doubly so by virtue of the fact that he called freely both on his colleagues and from an extensive bibliography. By having done so he has been enabled to condense a wonderful amount of information con-

(Continued on Adv. p. xxviii)



PITUITARY LIQUID

THE product is of standard strength. The package is dated. The doctor knows. He doesn't trust to luck.

It is Posterior Pituitary Active Principle in isotonic salt solution and is without preservatives.

$\frac{1}{2}$ c. c. ampoules (small dose) are labeled, "Obstetrical and Surgical."

1 c. c. ampoules (full dose) are labeled, "Surgical and Obstetrical."

Either in an emergency.

Literature on request

ARMOUR AND COMPANY
CHICAGO

SAVE MONEY ON YOUR X-RAY SUPPLIES

Get Our Price List and Discounts on Quantities Before You Purchase

HUNDREDS OF DOCTORS FIND WE SAVE THEM FROM 10% TO 25% ON X-RAY LABORATORY COSTS

AMONG THE MANY ARTICLES SOLD ARE

- X-RAY PLATES.** Three brands in stock for quick shipment. PARAGON Brand, for finest work; UNIVERSEAL Brand, where price is important.
- X-RAY FILMS.** Duplitzed or Double Coated—all standard sizes. X-Ograph (metal backed) dental films at new, low prices. Eastman films, fast or slow emulsion.
- BARIUM SULPHATE.** For stomach work. Finest grade. Low price.
- COOLIDGE X-RAY TUBES.** 5 Styles. 10 or 30 milliamp.—Radiator (small bulb), or broad, medium or fine focus, large bulb. Lead Glass Shields for Radiator type.
- DEVELOPING TANKS.** 4 or 6 compartments stone, will end your dark room troubles. 5 sizes of Enameled Steel Tanks.
- DENTAL FILM MOUNTS.** Black or gray cardboard with celluloid window or all celluloid type, one to eleven film openings. Special list and samples on request. Price includes your name and address.
- DEVELOPER CHEMICALS.** Metol, Hydroquinone, Hypo, etc.
- INTENSIFYING SCREENS.** Patterson, TE, or celluloid-backed screens. Reduce exposure to one-fourth or less. Double screens for film. All-mental Cassettes.
- LEADED GLOVES AND APRONS.** (New type glove, lower priced.)
- FILING ENVELOPES** with printed X-Ray form. (For used plates.) Order direct or through your dealer.



If You Have a Machine Get Your Name on Our Mailing List

GEO. W. BRADY & CO.

782 So. Western Ave. CHICAGO

Dysmenorrhea

and

Severe Nervous Symptoms

treated with

Corpus Luteum—Lutein

"In this last class, dysmenorrhea should be especially included. In my own practice I have observed, in a truly extraordinary manner, the cure or relief of many such cases through the medium of this type of organotherapy. My best results, however, have been gained in the administration of corpus luteum for the relief of the severe nervous symptoms attendant upon the menopause of both the physiological and artificial varieties and the functional amenorrhea of young women."—DR. ADAM P. LEIGHTON, JR., *The American Journal of Obstetrics and Diseases of Women and Children*, November, 1915, page 878.

The "Extraordinary" Results

referred to by Dr. Leighton were obtained by the administration of **Corpus Luteum** of the SOW as presented in

Lutein Tablets—H. W. & D.

2 grain, 100 in a tube; 5 grain, 50 in a tube

Complete reprint of Dr. Leighton's paper sent upon request

HYNSON, WESTCOTT & DUNNING

Pharmaceutical
Laboratory

BALTIMORE, MD.

(Continued from page 336)

cerning the most recent investigations on the modern concepts of syphilis.

The subject matter has been very logically divided in its arrangement so that there is presented a very good working knowledge of all phases of the subject, including even a history of the disease, its economic importance, etiology, pathology, clinical course, a description of the disease as it affects the various systems, including the endocrine glands, nervous system, organs of special sense, etc.

All the latest data concerning methods of laboratory diagnosis and most modern treatment, including the Swift-Ellis method for the treatment of syphilis of the central nervous system, are gone into with more or less detail.

All told this is perhaps the most satisfactory monograph which has appeared since the work by "Nonne."

THE SYSTEMATIC DEVELOPMENT OF X-RAY PLATES AND FILMS. By Lehman Wendell, B.S., D.D.S., Chief of the Photographic Work, Instructor of Prosthetics, College of Dentistry, University of Minnesota. Illustrated. Cloth. Price, \$2. Pp. 78. St. Louis: C. V. Mosby Company, 1919.

A more satisfactory little manual on roentgen-ray development can scarcely be conceived since technicality has been entirely superseded by practicality and everything in the way of superfluous details has been completely eliminated. Every roentgen-ray laboratory could well profit by having at hand a copy of this useful little manual.

SANITATION FOR PUBLIC HEALTH NURSES. By Hibbert Winslow Hill, late Director, Division of Epidemiology, Minnesota State Board of Health, and later

Director, Institute of Public Health; M.O.H., of London, Canada, and Professor of Public Health, Western University; New Executive Secretary, Minnesota Public Health Association. Cloth, \$1.25. The Macmillan Company, 66 Fifth Avenue, New York City.

This book gives the practical working details of Public Health Nursing. In reality it is a well written discussion of the subject of sanitation as it pertains to health and the physical development of the human race. It is one of a series of books dealing with the various aspects of Public Health Nursing.

THE PRACTITIONER'S MANUAL OF VENERAL DISEASES WITH MODERN METHODS OF DIAGNOSIS AND TREATMENT. By A. C. Magian, M.D., Hon. Surgeon, Manchester French Hospital; Hon. Surgeon, Wood Street Clinic for Genito-Urinary Diseases. Cloth. Price, \$3. Pp. 215. St. Louis: C. V. Mosby Company.

Written solely for the general practitioner as it is, there is necessarily eliminated in this little volume much of the more intricate and elaborate phases of the subject which characterize the larger works. But it is especially through its size that the author of this little compendium hopes to reach his goal.

The writer offers the happy yet intensely practical suggestion that the average text on genito-urinary diseases which has attained the age of five years, had better be cast in the junk pile, since the specialty has made such marked advance in that time.

For so rigid a condensation of the subject, this little work has covered the ground remarkably well and deserves recognition on the merits of its brevity and conciseness.

“Horlick’s”

THE ORIGINAL

The Preferred
X-RAY
Meal with
Barium Sulphate

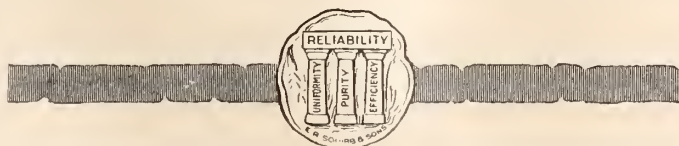
Write for
Literature

Is always clean, safe and reliable and protects your infant patients against the uncertainty and risks attending the summer milk supply, which bears such close relation to infant mortality at all times.

Avoid Imitations

Samples prepaid upon request

HORLICK'S MALTED MILK CO.
RACINE, WIS.



For Three-Quarters of a Century the Name

SQUIBB

Has Been Accepted as a Guarantee of Purity

Today This Label Is Equally Significant on

Biological Products

Summer Reminders:

TYPHOID VACCINE
(Plain or Combined)

TETANUS ANTITOXIN
(Immunizing or Curative)

THROMBOPLASTIN
(Local or Hypodermic)

BACILLUS BULGARICUS
(Types A and B)

PASTEUR ANTI-RABIC VACCINE SQUIBB (21 Treatments)

Can be given in the home. Initial treatments are constantly in stock and can be ordered by wire from

E. R. Squibb & Sons, 323 W. Lake St., Chicago, Ill.

For the Venereal Campaign:

SOLARGENTUM PROTARGENTUM
PROPHYLACTIC OINTMENT

E. R. SQUIBB & SONS, NEW YORK
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.
Biological Laboratories, New Brunswick, N. J.



Adrenalin in Medicine

1—Its Physiological Action.

THE active principle of the medullary portion of the suprarenal gland and other chromaffinic cells, adrenalin, has been used by physicians throughout the civilized world since the day we introduced it, almost twenty years ago. It has attained a position of importance in the medical equipment that was hardly dreamed of in those early days when comparatively little was known concerning its physiological action. Today its effect on most of the tissues is pretty well defined.

Adrenalin affects body tissues in a manner strikingly similar to the effect produced by stimulating the sympathetic nerve system. Thus, if the sympathetic nerves govern the contraction of certain unstriated muscle tissue, adrenalin, too, will contract it. If, on the other hand, the tissue in question is supplied with inhibitory impulses by this nerve system, adrenalin relaxes it.

These actions, however, are exerted neither through the medium of the sympathetic nerves nor directly upon the muscle fibres themselves. The receptive organs for these adrenalin impulses are the points of union of the sympathetic

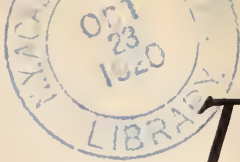
nerves and the unstriated muscle fibres—the myoneural junctions.

Probably the most important action of adrenalin is stimulation of the muscular coats of the arterioles. At first there is acceleration of the pulse rate, but the rise in blood-pressure which results from vasoconstriction soon excites the vagus centre and as a consequence the heart-beat is slowed and strengthened. Besides this indirect vagus action, adrenalin stimulates the heart directly, thus producing more complete evacuation of the chambers. In large doses, however, adrenalin predisposes the heart to fibrillary contractions.

The stimulating action of adrenalin is exerted also on the dilator muscle of the iris (dilates the pupil); the muscular fibres of the uterus and vagina; the retractor muscle of the penis; the pyloric and ileocecal valves; the glycogenolytic function of the liver; the salivary glands and the glands of the mouth and the stomach.

Adrenalin relaxes the muscular walls of the esophagus, stomach and intestines. Also on the muscular coat of the bronchioles adrenalin has a relaxing effect, due probably to vagus stimulation.

PARKE, DAVIS & COMPANY



THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 10

FORT WAYNE, IND., OCTOBER 15, 1920

PER YEAR, \$2.50
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES	PAGE		PAGE
Transverse Incision in Pelvic Operations. Myron L. Curtner, M.D., Vincennes, Ind.....	337	Physical Therapy	349
The Physician. The Triumphs and Dangers of Specialism. Frank B. Wynn, M.D., Indianapolis.....	338	Editorial Notes	350
The Abuse of Catharsis in Infants and Children. Milo K. Miller, A.B., M.D., South Bend, Ind.....	343		
		MISCELLANEOUS	
		Deaths	354
		News Notes and Personals.....	355
		The Truth About Medicines.....	363
		Book Reviews	364
		SOCIETY PROCEEDINGS	
		Indiana State Medical Association.....	358

NEXT ANNUAL SESSION, INDIANAPOLIS, SEPTEMBER 28, 29, 30, 1921. LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.
ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS
OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103,
ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

New (2d) Edition

THOMPSON ON SYPHILIS

A CONSIDERABLE portion of the work is devoted to diagnosis and treatment. The chapter on laboratory diagnosis is made especially full since the necessity of laboratory aid is more evident for the successful treatment of syphilis than for any other disease. Illustrations, to a large extent, are from photographs taken by the author.

Since the appearance of the first edition the author has been particularly impressed with the importance of *Visceral Syphilis*. Consequently, after carefully reviewing the literature, he has practically rewritten the sections dealing with it. All new material of importance has been added and certain sections, for example that on Syphilodermata, have been amplified. The author emphasizes the practical clinical aspects of the subjects under discussion. Only those methods of diagnosis and treatment which have proved to be useful and efficient are included.

By LOYD THOMPSON, M.D., Physician to the Syphilis Clinic, Government Free Bath House; Visiting Urologist to St. Joseph's Hospital; Consulting Pathologist to the Leo N. Levy Memorial Hospital, Hot Springs, Arkansas; Lieutenant-Colonel, Medical Corps, U. S. Army, etc.

Octavo, 486 pages, with 81 engravings and 7 colored plates. Cloth, \$7.00 net

New (2d) Edition

SYSTEMATIC TREATMENT of GONORRHEA

THIS thoroughly practical hand-book is an outcome of Great Britain's intensive campaign against Venereal Disease during the War. The establishment of great Treatment Centers afforded unrivalled opportunities for the close observation and recording of thousands of cases, and the careful checking of the results of various methods of treatment. The therapeutic measures described in this book are those which were found to be most valuable, and to give the best results in actual practice.

By NORMAN LUMB, O.B.E., Late R.A.M.C. Specialist in Venereal Diseases and Officer in Charge of Division, 39 and 51 General Hospitals, B. E. F.; Clinical Assistant, St. Peter's Hospital for Stone. 12mo, 123 pages. Cloth, \$1.75, net.

706-710 Sansom Street
PHILADELPHIA

LEA & FEBIGER

2 West 45th Street
NEW YORK

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, Indianapolis, September 28, 29 and 30, 1921

OFFICERS AND COMMITTEES FOR 1921

President.....DAVID ROSS, Indianapolis
 1st Vice President.....HUGH J. WHITE, Hammond 3d Vice President.....OTTO R. SPIGLER, Terre Haute
 2d Vice President.....IRA M. WASHBURN, Rensselaer Secretary-Treasurer.....CHAS. N. COMBS, Terre Haute

SECTION OFFICERS

Surgical Section—Chairman, Charles C. Terry, South Bend; Vice Chairman, H. K. Bonn, Indianapolis; Secretary, E. E. Padgett, Indianapolis.
 Medical Section—Chairman, Fred R. Clapp, South Bend; Vice Chairman, George G. Richardson, Van Buren; Secretary, Claude S. Black, Warren.
 Eye, Ear, Nose and Throat Section—Chairman, William A. Hollis, Hartford City; Vice Chairman, Carl H. McCaskey, Indianapolis; Secretary, Eldridge M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1921), Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington. For two years (term expires December 31, 1922), Dr. Joseph Rilus Eastman, Indianapolis. Alternate, M. R. Combs, Terre Haute.

COUNCILORS

Chairman, G. W. H. Kemper, Muncie.

DISTRICT	TERM EXPIRES	DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920	7th—S. E. Earp, Indianapolis.....	December 31, 1923
2d—J. B. Maple, Sullivan.....	December 31, 1921	8th—G. W. H. Kemper, Muncie.....	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922	9th—William R. Moffit, Lafayette.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920	10th—E. M. Shanklin, Hammond.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921	11th—G. G. Eckhart, Marion.....	December 31, 1921
6th—T. S. Spilman, Connersville.....	December 31, 1922	12th—E. E. Morgan, Fort Wayne.....	December 31, 1922
		13th—H. M. Miller, South Bend.....	December 31, 1920

The HYGEIA HOSPITAL SERVICE

offers a medication of definite therapeutic value in the correction of narcotism and alcoholism. Hyoscine-Scopolamine have no influence in destroying the craving—separating the user from the drug is not a treatment—the craving must be destroyed—there is but slight discomfort from the treatment. The toxemias resulting from the habits are corrected.

WM. K. McLAUGHLIN, M. D., Supt.

Office, State-Lake Bldg., Suite 702-4

Chicago, Ill.

If Interested Write for Reprints

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., OCTOBER 15, 1920

NUMBER 10

ORIGINAL ARTICLES

TRANSVERSE INCISION IN PELVIC OPERATIONS*

MYRON L. CURTNER, M.D.
VINCENNES, IND.

In choosing an incision for pelvic operation, the operator should use an incision that affords him ample room for work, renders easy access to the pelvis, and takes into consideration the after effects to the patient from the operation. In lax abdominal walls, especially in women who have borne a number of children, the operator always has in mind the possibilities of a postoperative hernia in the scar from the incision of entrance into the abdomen.

In 1896 Kustner and Rapin, at the Second International Congress for Gynecology and Obstetrics, presented a method, then new to the profession, of opening the abdomen with a transverse incision in the place of the median line incision. This incision was made in the region of the suprapubic hair, in a transverse direction through the skin and subcuticular tissue, but the fascia as well as the peritoneum was divided vertically in the median line. Pfannenstiel, in 1900, modified this incision by incising the fascia also in a transverse direction, separating it both above and below from the underlying muscles by a blunt dissection and entering the abdomen through the linea alba and the peritoneum. This modification was devised to abolish postoperative hernia. By this transverse method of dividing the fascia Pfannenstiel perfected one of the principal advantages to be derived by the procedure, because the fascia is now left completely intact over the vertical incision in the linea alba, thereby getting rid of the unfavorable tension exerted by

the transverse and oblique muscles of the abdomen on the fascial scar. Hartman, of Paris, and Stimson, of New York, had independently practiced the transverse fascial incision, but Pfannenstiel enjoyed the honor of being the first to plan, execute and publish the incision which bears his name.

The technic is as follows: the patient is placed in the Trendelenburg position and a transverse incision is made either in the transverse skin fold, or at the edge of the suprapubic hair just below it. The length of the incision varies from 3 to 6 inches. The wound is now stretched with the fingers for enlargement, better exposure of the fascia, and the hemostatic effect it produces. Few vessels are divided, giving rise to a minimum amount of hemorrhage and causing little interference with the subsequent nutrition of the flaps. Seldom is it necessary to ligate more than two or three vessels in the wound, and many times no ligation at all, thereby reducing the amount of foreign material introduced, which, of course, has an important bearing on wound union. The fascia is next divided in a transverse direction as far, if necessary, as the outer border of the recti muscles and often one or two inches nearer the pubes, because we all know in pelvic surgery an inch below is worth two above. If necessary to extend the fascial incision it should curve up to avoid injury to the external rings. The length of the fascial opening depends on the size of the vertical incision in the peritoneum. Now we have the fibers of the skin, nerves and fascia divided in the parallel direction, and not cut across as is the case in the vertical incision. The linea alba is now divided, which discloses the peritoneum. This is divided in a vertical direction, the lower portion retracted, preferably by a self-retaining retractor, this being the only permanent retractor required. A small movable retractor is sufficient for the upper flap.

* Read before the Knox County Medical Society, Aug. 30, 1920.

The advantages to the patient are of extreme importance. The upper flap covers the intestines and few if any laparotomy pads are necessary excepting in pus cases, thus preventing one great cause of postoperative adhesions. A perfect exposure and easy access to the pelvic organs thus afforded lessens greatly the amount of intra-abdominal manipulations, and as a result a comparative freedom from shock and postoperative complications (noticeably when employing this method after using the longitudinal one).

Advantages to the operator—the incision thus made is in close proximity to the pelvic organs, allowing the operator to work to the greatest advantage, since the opening centers the field of operation, giving him free access in every direction and not compelling him, as one well known operator has said, to work in the lower end of a rigid "V."

The muscles being free from their overlying fascia are easily drawn aside and can be kept out of the way with a minimum amount of force. Since the long axis of the incision runs from the adnexa of one side across the fundus and to the adnexa of the other, a maximum exposure is offered with a minimum incision. In Childs' series of 100 cases there were no acute dilatations of the stomach and not one of ileus, and he says that abdominal distension was conspicuous by its absence.

To secure the strongest wound after operation the incision must be made in the strongest part of the abdominal wall by a method that will interfere as little as possible with the integrity of the fascia and muscles. We find that spontaneous hernia is seldom, if ever, found in the lower half of the distance from the umbilicus to the symphysis pubes, since it is a region abundantly supplied with strong muscular tissues lying in close proximity and strengthened by the over-lapping pyramidalis. The upper half of this distance is the weakest part of the abdominal wall, excepting the abdominal rings, because here the recti broaden, thin out and separate to pass the umbilicus. Due to the simple separation of the recti and thinning of the fascia caused by pregnancy or large abdominal tumors, hernias are often seen here. It would seem then that this is one region to stay away from and not weaken further.

The bladder lies close to the peritoneal scar, and as it fills pushes the intestines away, thereby preventing their adhering to the wound. "The Lord be with you," in a case of infection in a wound of this kind, is the common criticism of the skeptic, but it has been proved in the

clinics of Wells, Tovey and Childs of the New York Polyclinic that these infected wounds clear up and heal fully as rapidly as the longitudinal ones, and with no postoperative hernia, which is not always so with a longitudinal incision. Childs recorded 100 cases in consecutive order to better set forth the possibilities of their incision, and among these fourteen were septic at the time of operation, all of which healed by primary union. Of the 100 cases, three failed to heal primarily, one instance due to an unabsorbed blood clot and two to an accumulation of serum. Not a death is recorded. There was one postoperative complication due to a mild bronchopneumonia. The percentage of primary union in this series was extremely high, being 97 per cent. Tovey and Wells of the New York Polyclinic have had their patients out of bed on the second and third day after the operation and sent them home at the end of the seventh and eighth day.

In my own cases I have not as yet seen a postoperative hernia in the use of this incision, and I have not been able to get a report of postoperative hernia from any one who has used the incision.

In preparing this paper I am in debt to Dr. John G. Davis of the United States Navy for help, aid and assistance, for which I thank him.

In closing I wish to quote from the report of M. le Doctor Rouffart of Brussels, Belgium, at the first meeting of the Association des Gynécologues et Obstétriciens de langue française: "The superiority of the transverse incision over the longitudinal incision from the anatomic and clinical standpoint will cause it to be chosen in the majority of gynecologic and obstetric laparotomies."

THE PHYSICIAN

THE TRIUMPHS AND DANGERS OF SPECIALISM *

FRANK B. WYNN, M.D.
INDIANAPOLIS

Specialization is the key which has unlocked the door of modern progress. The world claims its virtues and extolls its marvelous achievements. In every avenue of human activity specialism prevails—no less in commerce and manufacture, than in science and art. Thankful for the rich fruits of benefit, it should also be our duty more often to enquire, if there are not perhaps at the heart of the system, subtle and undermining influences which may threaten the foundations of our civic life.

* Sixth of a series of articles by Dr. Wynn which will appear regularly in *The Journal*.

By intensive effort in a limited field and the economic advantage of labor division, specialization may reveal wireless telegraphy, produce a marvelous machine, and bring luxuries within the reach of all; but do we stop to think of the multitude who become mere unthinking cogs in the wheel of industry; who grind their lives away without initiative; whose hearts do not pulsate with the joy of their work; whose single thought is to produce quantity and receive the wage? On the one hand, division of labor, cheaper production, and larger dividends for the corporation; on the other hand, organization, unionization and a larger wage for labor. The goal held up is not contentment in life, joy in labor, perfection in work—but how well will it pay? Is it pertinent to ask if medicine has shared in this world-wide trend toward selfish materialism? If so let us beware lest our profession degenerate to the level of a trade.

Medical specialism has grown with phenomenal rapidity. Beginning a few decades ago as a mere tributary of the main stream of medical practice it has swollen to a flood, and the question is where will it end? In its earlier history, the so-called proprietary medical colleges were the most potent influence in spreading the propaganda of special medicine. Under the newer régime in medical teaching, conditions are improved, but it must be admitted that the curricula and clinics, still give special branches a dominant influence. The truth of this statement is evinced by the fact that rarely does a medical student graduate without resolving on a specialty—at once or in the near future. By him specialists are grouped as a class of the elect in medical practice. General medicine he looks on as the recourse of the mediocre and unambitious. Specialism, in his judgment, calls for postgraduate study; for general work, anything will do, not even an internship being necessary. He views general practice as a sort of purgatory for the abandoned in medicine, from which one may occasionally be translated to the realm of the blessed in specialism! And now comes the World War, inundating the country with specialists of high and low degree! Lastly, the state and municipality have gone into the specialty business. But this opens a new and difficult problem which it is not our province to discuss at this time.

The triumphs of specialism in medicine, have been the chief glory of the profession. Who would be so unfair as not to give full credit to the source of these multitudinous blessings? It is a record dazzling the eyes of the world with its brilliancy, and swelling the heart of mankind with thankfulness. In the realm

of pathology alone it has yielded knowledge of the causes of disease and laid firm the foundations for modern triumphs in medical and surgical practice; it has made plain the field and revealed the methods for tilling the soil in preventive medicine. No less amazing have been its achievements in the so-called practical branches of the profession. But let not this brilliancy blind us to the existence of corroding agencies which may eat at the vitals of our profession.

From the very outstart medical specialism has exhibited a virile aggressiveness somewhat at variance with traditional medical modesty. The specialist feels impelled to write or talk about his subject on every hand. The profession in general has condoned the practice, although with occasional mutterings. In the medical society, the votaries of specialism are quick to proclaim its virtues. Medical journals have unstintingly spread its propaganda. Almost every mail brings the reprint which we are sometimes disposed to consider obtrusive. So long as this aggressiveness is scientific in bent, representing an earnest desire to make the truth known and felt, we should welcome it with open arms. Such, in the main, are the contributions of specialism. Sad to relate, along with these virtuous efforts, there creeps in all too often, the spirit of arrant boastfulness—constituting the bad manners of specialism. Who is not familiar with titles like the following: "My First Hundred Operations for Ectopic Pregnancy"; or "Analytical Study of Three Hundred Successful Appendectomies." This type of individual is lavish with embellishments in discussion, startles by the fecundity of his data, and impresses by his assertiveness. The observing practitioner listens with rapt attention, but subtracts liberally. The latter may be courted by good manners; he is more likely to be won by plain straight-forward, scientific presentation; but seldom is he duped by arrant boastfulness.

During this period of growth in specialism, what has become the attitude of the general practitioner? Overwhelmed by multiplicity of tasks; bereft of sleep and the comfort of regular meals; piteously overworked by a thoughtless and insistent clientele; shockingly underpaid for his services; tense with the anxiety of critical cases; by the arduousness of his labor robbed of the opportunity for medical reading and study; wanting, let us admit, in the refinements of special diagnosis, yet gifted with skill in managing the living individual, reacting to his environment—how has this man behaved toward the triumphant advancement of

specialism? Most pathetic is his apologetic reply: "I am only a general practitioner." As he looks on the brilliant achievements of specialism, he sinks into the slough of despondency. He comes to think of his specialist colleague as one dwelling always in Elysian fields and reaping rich fruits with a minimum of effort. His imagination draws sharp contrast between their labors and rewards. Avarice eats at his heart. Envy comes to sit with him, where formerly rode faith and hope and courage. Viewed from afar he gets a distorted impression of the specialist's life, which he pictures as always in the midst of flowery beds of ease. He weighs his own sacrifices—his sleepless nights, his hastily swallowed meals, his meager fees and belated vacation against the imaginary ease, the smug and thrifty appearance of the specialist whom he meets. He coddles his conscience into the conviction that something is fundamentally wrong. Dangerous ground this on which he is treading. He is in imminent peril of sinking into the mire of materialism. Here arises the degrading impulse to enter into partnership with sinful specialists, in the secret division of fees—a practice wholly at variance with the honor and idealism of medicine and medical ethics. Thus, has grown out of specialism the nefarious and unprofessional practice of rebating and fee-splitting—a thing material, mercenary, dishonest and shocking to the medical conscience. Whilst not so frequent as often alleged, that it does exist is evinced by threatened enactment, coming up from time to time before state legislative assemblies.

The disparity alleged between the net incomes of specialists and general practitioners is more apparent than real. Rather a wide acquaintance with both groups warrants the writer in the deduction that more general practitioners amass comfortable fortunes than specialists. Of the four physicians in my native city who accumulated a considerable degree of wealth (one founded the Robert W. Long Hospital, another established the Watterman Research Endowment of the State University), all were general practitioners. On the other hand, there comes vividly to mind the memory of four noted specialists, now deceased, who were contemporary colleagues of the first named. They were all distinguished—one of them noted as a large charger, a good money-maker and investor. Yet not one of the latter left a comfortable supporting income for his family.

It is notoriously true that specialists seldom finish their careers full handed. Explanation of this fact is to be found in the relatively short fastigium, of the specialist's active career.

He is always obliged to spend liberally in keeping up appearances. He is a member of expensive clubs; must maintain offices of considerable pretention; drive a fashionable automobile and live in dignity comporting with high rank in the profession. The habit of extravagance is acquired, and strange to relate he is a frequent victim of fake investments. He devotes much time to attending medical meetings and preparing papers for them. His professional prestige makes him a favorite target for subscriptions to charitable undertakings which have a medical bearing. He gives largely of his time to medical teaching, or attendance on hospital or dispensary clinics—all of which is very instructive to him, but time-consuming and obstructive to business getting.

On the other hand, many general practitioners are in comfortable circumstances; especially in the smaller cities and towns. Within a fortnight I saw a 600 acre farm of the finest land which belonged to a country doctor. Another country practitioner under 50 had just sold farm lands for \$75,000, all of which he had invested in government bonds. True, the general practitioner receives smaller fees (often outrageously small), but his earning career extends over a longer period; and what is still more important, the source of his income is more stable. The character of his practice and the gradual growth of his income beget the habit of frugality. He learns to save and invest wisely.

Instead of condemnation of specialism for elevating the level of fees, the profession in reality owes it a lasting debt. A deservedly higher standard has been set which we should all strive toward. Competition in all special lines has become so acute, that no longer does the charge of a money-making class hold as in the halcyon days of a few decades ago.

In this connection it is but fair to say that the surgical specialist enjoys a monetary advantage over his less spectacular colleague, the internist, the laboratory man or the general practitioner. To the average layman an amputation, a herniotomy, or the removal of an ovarian cyst possesses heroic appeal, however simple the mechanics of the procedure. He pays a good fee for the operation without quibble. On the other hand, the quieter methods of diagnostic procedure appear to him commonplace. Yet they may have required the most skilful technical effort and in their interpretation call for the exercise of the finest judgment—decisions, in fact, on which hang life and death or perhaps determine surgical action. Yet at the payment of any considerable amount

for such service, the layman expresses astonishment. In cases where courts determine what constitutes reasonable remuneration, judges are more likely to award liberal allowances for surgical operations, but reduce other fees to the dead level of a unionized scale.

The public is greatly in need of enlightenment on what constitutes proper valuation of professional service rendered—whether laboratory, medical or surgical. The layman needs to be taught that the practitioner who carries him safely through a siege of typhoid fever or pneumonia, with their perilous risks, has performed a service as large as the surgeon who amputates a limb, or drains a gallbladder. Systematic cooperative attempts should be made in the profession looking to a readjustment. Such effort will work to the advantage of each group and cement the profession as a whole in better fellowship.

Turning from this critique of the economic phases of specialism, I wish to consider a trend toward materialism which I can but believe is prone to lead to weakening of that medical idealism which has marked the profession from the days of Hippocrates to the present. In its very essence medical specialism means restriction of effort to a limited field which is intensively cultivated. The specialist becomes a piece-worker prone to forget the machine as a whole, just as the piece-worker in a factory becomes an automaton, uninterested in the machine of which his part is a unit. The deadening effect of piece-work on the intellectual and moral fiber of the laborer is a psychologic fact which wide-awake employers are beginning to realize has a bearing on the labor situation. His chief thought comes to be the wage and not the perfection of workmanship or the joy in its performance.

To a limited extent the same thing is true of specialism in medicine. Its trend is toward materialism. First it has taken a large number of men out of the realm of general medicine and assigned them to limited areas of thought and practice. The lay-world has noted the change with sadness. The family doctor had become an institution in the community—beloved and idealized. He was bound to his clientele by the indissoluble ties of confession, confidence and affection. Let us grant that he knew less of the intricate mechanism of the body and its functioning, but acknowledge him as gifted in the study of the individual as an entity—his heredity; his endowments and weaknesses; his reaction to physical and mental stresses. These things he knew first hand. How different his from the specialist's viewpoint!

One makes a lifetime study of an individual as a whole; the other takes a momentary glance at a limited area—at substance, a thing, an organ and not the coordinated functioning organism as a whole. Specialism sees a beginning tuberculosis at the ureteral orifice, notes the "choke-disk" of brain tumor; clarifies a situation by a positive Wassermann, or discovers an operable cancer of the colon. How fine it all is! What an intellectual achievement! Let us give full credit here where credit is due. But it is just as certainly true that the specialist in his hot pursuit for cold facts, loses ardor for the sentimental, moral and spiritual elements of man. He develops hypertrophic mentality along special lines, but suffers atrophy of spiritual and moral sense for the sacredness of the human body and human life. Too often the goal sought is ambition—a new method, a record on operations, or a consuming desire for volume of business—this rather than service as a physician ministering to the comfort and happiness of mankind in the healing or alleviation of disease.

The specialist who achieves large business success is in grave danger of becoming self-sufficient. Who would dare to question his opinion so superior on his special subject? Counsel would only jeopardize the patient's chances. To his way of thinking what general practitioner would have the temerity, for example, to suggest postponement of a tonsillar operation in view of a rapid heart suspicious of blood-stream infection; or that a tachycardia in a patient with enlarged thyroid might be due to incipient pulmonary tuberculosis; or again, that pain in the McBurney area may presage an outbreak of pneumonia? In some this self-sufficiency may become arrogance as conceited and offensive as in the ignorant rich. This type of man is prone to boastfulness in the matter of his reading and study. "I have no time for anything except my specialty," is his vain and self-satisfied assertion. His type is exceptional but all too prevalent. On the other hand, many special men seek in every possible way to enlarge perspective. From all available sources they endeavor to illuminate the restricted field in which they labor. Three or four years ago such an one spoke to me with great enthusiasm about postgraduate work he had been doing. In reply to my remark that I supposed he had devoted himself entirely to his special branch of abdominal surgery he said: "O, no! I took laboratory courses and work in general diagnosis!" This man is beloved throughout the country for his fine spirit, his sterling character and his great ability. Toward his bed

of invalidism the whole profession turns to salute a hero—a man four-square and a surgeon measuring up to the highest ideals of specialism!

Whether we accept the biblical account of creation or not, certainly it will not be controverted that man ranks first in the creative order. The human body is the most wonderful temple that we know about; a house not made with hands. It is therefore a sacred temple. For centuries past this has been the idealistic conception of medicine. What matters it to us if it be the body of pauper or millionaire, saint or sinner, negro or chinese, idiot or seer—to us it bears the divine impress. Before this shrine as true physicians we bow with reverence, taking no account of age, social or mental status. To us life, human life, becomes a sacred thing, whether *in utero*, in the matured individual of amazing complexity and power, or the aged seer, rich in achievements. All alike command us to reverent duty as custodians of the earthly tenement and its occupant! With such a conception we are not apt to desecrate its wondrous mechanism. We will be slow to tear down what we cannot build up; and we shall view wanton mutilation of the body in the name of surgery as criminal.

In this connection, is it pertinent to ask if the advent of asepsis and improved surgical technic have not led oftentimes to forgetfulness of these truths? The prevailing view of laymen is that we *do* forget. A brief historic review of surgical evolution during the past four decades will offer convincing evidence that the charge is true. Too often we have displayed the common human weakness of yielding to faddism; despising the old simply because it is old—forsaking the steady light of proved truth for the glare of a rocket shot into the professional sky. Thirty years ago what burdens of offense were charged to the ovaries! These organs were sacrificed and mutilated for neuralgia, neurasthenia, hysteria, dysmenorrhea, epilepsy and insanity, and to what end? Woman was robbed of her greatest function; her body deprived of an internal secretion; and the case ultimately shifted from surgeon to neurologist! With larger reverence for the body parts, and the whole functioning organism, this unsexing would not have occurred.

Following close in sequence on this procedure has come the appalling multiplication of abdominal and other major operations—many of them imperative; most of them justifiable; a considerable residue unwarranted, if not criminal! It is rather disheartening to those of thoughtful mind to observe the insidious hard-

ening of the medical conscience; to note the haste and lightness of thought with which major surgical attack is advised and undertaken. Very often not even time is taken for the painstaking study of a case from every angle. Instead, a short-cut method is pursued. "We will open the abdomen and see," expresses the unscientific procedure followed. It becomes our bounden duty to enquire if perhaps there is not going on at the present time an orgy of surgical excess? Everywhere hospitals, everywhere surgeons—many excellent, some indifferently equipped, others bad! Already in the wake of this surgical excess are appearing unfortunate sequelae, sure to increase with the near, oncoming years. No one appreciates more fully the truth of this statement, than the abler specialists themselves. For the correction of this trend there must come to everyone essaying to do major surgical work, a new baptism of reverence for the sacred human body. Let him get out of the rut of materialism where he sees only the special part or thing and look on the man—the pulsating, reacting, thinking man with a human soul!

The public for long insistent on specialism is now awakening to the fact that it is not an unmixed blessing. Generally the layman acknowledges great benefits from its wise ministrations. On the other hand, occasionally he runs the gamut of specialties, isms and cults; drifting from uncertainty to uncertainty, with waning confidence and depleting purse. Finally, in dire extremity, he exclaims: "O, for a doctor! An old fashioned doctor! One who is willing to get acquainted with my family, learn their weaknesses and idiosyncracies; ready to serve them by day and by night; able to treat typhoid fever, pneumonia and measles; one to whom I can tell my secrets and be not afraid!"

To such a bemoaning appeal let it be said with assurance, "The Doctor of the Old School" (the physician who treated all the ills to which flesh is heir) is gone never to return. Beloved of memory and idealized in literature, he served well his day and generation. We may note with sadness his passing, and with profit seek to revive some of his virtues. The world insists on a new and better order, which is being wrought out of specialism. The product of human effort, it is but natural there should be some of the faults of human weakness. But with all its disappointments and shortcomings, naught will hinder the triumphant forward march of specialism. To correct its errors for its own greater glory, and the upbuilding of the profession, should be our heart's fondest desire.

With rapidly changing conditions of the industrial, commercial and civic world, must come corresponding changes in the methods and requirements of our professional life. To meet these in proper spirit and work out their solution with intelligence and justice is a paramount duty at this time. Several important agencies are already at work looking toward these ends. Splendid advancement has been made by the state boards of medical registration in raising the requirements for medical practice. The Council on Medical Education of the American Medical Association has performed a noteworthy service to medical education in elevating the standard of requirements in medical colleges. Similar efforts now being made to standardize hospitals is a move in the right direction. The National Research Council is reaching out for cooperative effort among general practitioners in the study of clinical, statistical and other problems of both scientific and practical interest to the profession. The American College of Surgeons and the American College of Physicians, by the high conditions of membership in those organizations, are doing much to improve the tone and status of specialism. Their scope of protection, however, is necessarily limited, to a relatively small number engaged in special work. Some way must be devised for a more inclusive standardization of those worthy to be classified as specialists. Mere announcement by sign or card, does not offer to the public proof of ability or experience; nor is it fair to those who have made adequate preparation. It would seem that in the near future, the state must assume responsibility for those qualified to practice in special fields. Toward the attainment of this end the whole profession will look with eager longing. Specialism is undergoing a severe trial. In the crucible of regeneration, may the fires of wisdom and energized endeavor burn out the dross and purify and multiply its manifold blessings.

(To be continued.)

THE ABUSE OF CATHARSIS IN INFANTS AND CHILDREN

MIL0 K. MILLER, A.B., M.D.
SOUTH BEND, IND.

The pediatrician is daily confronted with problems concerning the use and abuse of catharsis in infancy and childhood. Rarely is a patient brought for its first visit, whose anxious parent or nurse has failed to administer vigor-

ous and oftentimes repeated catharsis, regardless of the etiology of the disease from which their defenseless charge is suffering. Too often more harm than good has resulted from the popular conception that "a thorough cleansing of the bowels" is the essential prelude to all forms of treatment. Perhaps the medical profession is partly responsible for this conception. With a full realization of the good that is accomplished by a quick and thorough emptying of the gastrointestinal tract when indicated, I wish to emphasize the harm that may be done by the abuse of catharsis in infants and children.

The most harm is probably accomplished in the continued use of cathartic drugs in chronic constipation. The primary effect of cathartics in general, is to cause abnormal stimulation of the bowels. They act as irritants and produce the same symptoms as infections of the alimentary tract, namely, liquefaction of feces, mucus, gas, sometimes blood and pain. Their secondary effect is to induce a state of depression and inactivity which lasts much longer than the stage of stimulation. When cathartics are administered frequently and continually, their stimulating effect gradually diminishes while the sluggishness increases. It cannot be denied that in the acute and spastic type of constipation, drugs properly administered accomplish a great deal, but with few exceptions they are ineffectual in the curative treatment of chronic atonic and mechanical constipation. Constipation is often the sign of good digestion and well being in a well nourished baby who is getting enough food and gaining normally. How often is such a condition sought for therapeutically after an alimentary disturbance, chiefly by the limitation of carbohydrates, and welcomed as a sign of clinical improvement! Most cases of chronic constipation can be cured without the aid of medicines by means of education, exercise, psychotherapy, dieting, hydrotherapy and massage.

The abuse of cathartics may induce hemorrhoids, jaundice or pruritus. Inflammation of the gastro-intestinal tract, anemia or general debility contraindicate their continued use.

In acute inflammatory conditions within the abdomen, Nature's first attempt is to decrease peristalsis near the affected region. The second effort is to limit the infection to the smallest possible area by means of adhesions. Increased peristalsis means a mechanical spreading of infection on the peritoneum and delay in the formation of protective adhesions. Hence any effort to increase peristalsis by catharsis is

strongly contraindicated. Quain¹ states that without exception, every fatal case of acute abdominal disease he had seen, had received some active cathartic at the beginning of the disease. Illustrative of the danger of producing active catharsis in intestinal obstruction is the following case:

R. E., aged 3 years, referred by Dr. Wiseman of Lakeville. Child had had no bowel movement for three days and had vomited everything, including water, for two days. No fecal vomiting. No blood passed. Had been given several doses of castor oil since the first day. Its administration and enemata were repeated without avail. Dr. Wiseman, seeing the patient the third day, recognized the intestinal obstruction and referred the patient to us, advising immediate operation. At 10 a. m. the third day of the disease, the patient presented an extremely toxic condition. The abdomen was distended, tender and rigid. By rectum a sausage-shaped tumor was distinctly felt. White blood corpuscles, 28,000. Immediate operation was refused after a careful explanation of the condition to the parents, who still persisted in their belief that purging would produce some miraculous remedial effect. The child became rapidly more toxic and was brought back late at night for operation. With the child in a moribund condition, Dr. Baker was reluctant to operate, but it was the only chance. At operation over a foot of ileum was found to have formed an intersusception through the ileocecal valve with beginning gangrene. The intestine above was purple and greatly distended. The child died two hours after operation.

With avoidance of catharsis and with early operation, the disaster would probably have been avoided.

In cases of intestinal obstruction "patients are never sick because their bowels do not move, but the bowels do not move because they are sick."

The third class of patients who suffer from the abuse of cathartics are infants or children in whom the diagnosis is obscure or uncertain. So often pyrexia due to an otitis, pulmonary affection or pyelitis is blamed onto an "intestinal toxemia," that shibboleth of the medical profession. It is a daily experience when called to see a sick child to find that the usual custom of "cleaning out the bowels" has been followed, regardless of the cause of the disorder. As a result of the catharsis a stool is presented which rarely fails to contain mucus and undigested food residue. How easy it is to attribute the patient's disorder to a gastro-intestinal derangement and proceed to administer another cathar-

tic. Thus a vicious cycle of recurrent constipation, catharsis with a resultant abnormal stool, etc., is soon established. A brief synopsis of a recent case exemplifies this condition.

E. N., aged 5 years, seen in consultation, gave a history of having had "influenza" in February, 1920. Since that time she had had several recurrent attacks of fever, each of two or three weeks' duration. On the assumption of a gastro-intestinal disorder frequently repeated administration of castor oil, constituted the chief treatment. I saw the patient late one night in May with a temperature of 105. She had lost a great deal of weight as a result of fever, anemia, limitation of diet and catharsis. Physical examination aside from the emaciation was negative. The leukocytes were 30,000. The urine was loaded with pus (2,500 cells per cubic millimeter). The colon bacillus was the infecting organism. With liberal dietary régime and appropriate treatment a slow but uneventful recovery from the pyelocystitis took place.

So many mothers become worried when twelve to twenty-four hours expire without a stool from their infant. Usually this is the signal for a dose of "castoria" or castor oil and the consequent establishment of a vicious cycle of constipation and catharsis. Some go so far as to administer a dose of castor oil every week, regardless of indications, on the assumption that a good "clean out" is necessary and essential to their offspring's well being. Rarely does one fail to control infantile constipation by the proper regulation of habit, feeding intervals and carbohydrate percentage of the food. Parenthetically, it may be stated that the fallacy of increasing fats on the assumption that they are laxative should be guarded against. The combination of excess fats with calcium to form hard white soaps, is a common cause of constipation in infants. The hard, dry, crumbly light brown stool caused by excessive starch is also characteristic. In older children the use of fruit, coarse, well cooked cereals, the control of habit, occasionally combined with massage overcomes one's difficulties if the cathartic and enema habits are discontinued.

The two most common drugs misused are castor oil and calomel.

The active principle of castor oil is the triglycerid of ricinoleic acid which splits in the intestine and acts as an irritant. The doses usually employed in children are about five times the adult dose, comparatively speaking. It has a slowing effect on the pulse, retards evacuation of the stomach and has a depressing influence on the appetite.

1. Quain: J. A. M. A. 59:27, No. 1 (July 6) 1912.

Calomel is thought to act by partial change to an irritant mercuric salt or protein compound. It may produce symptoms of subacute mercurial poisoning. Abt² showed that after the administration of calomel and other cathartics, that mucus and microscopic blood were present in the stools for several days following the catharsis. Calomel produced the greatest amount of irritation of any cathartic employed.

Calomel was formerly thought to be both a biliary stimulant and an efficient intestinal antiseptic. Schütz³ has shown it to be neither but quite the contrary. According to this and other authorities⁴ it has been shown that the action of calomel on the intestinal mucosa is harmful and in favor of bacterial growth. Neilson and Hyland⁵ show, in cardiac patients, that during active purging there is a 25 per cent. decrease in pulse pressure, that the number of heart beats decreases 14 per cent., with development of arrhythmias in many cases.

Alvarez and Taylor,⁶ studied the effect of purging in animals. Following brisk purging the bowel was full of gas and fluid. The mesenteric circulation was disturbed. Excised segments beat poorly and irregularly in Lock's solution. They fatigued quickly and responded poorly to drugs. Some parts of the bowel showed abnormal irritation while others failed to respond at all to powerful stimuli. This unevenness in the gradient of muscle forces must interfere with the steady progress of foods through the intestine and probably favors the production of colic and gas pains. Their conclusion is that it is not wise to purge shortly before an operation in which the bowels must stand the insults of drying, handling, cutting and sewing.

Mall⁷ showed that the circulatory changes of ischaemia and hyperaemia accompanying the successive contractions and relaxations of peristalsis cause a more rapid dissemination of absorbed substances into the blood vessels and lymphatics. If pathologic products exist in or about the intestine, increased peristalsis may cause an increased toxemia.

Food normally passes rapidly from the stomach and through the small intestines to remain in the cecum and colon for from twelve to twenty-four hours. The maintenance of a certain equilibrium between physiologic and bac-

terial processes is necessary for normal bowel function.⁸ Cathartics disturb this poise to a marked degree, making their use a matter of grave consideration. Bacteria flourish unmolested by intestinal ferments for some time following depletion and exhaustion of the intestinal mucosa by a powerful cathartic.

Cathartics have a limited use in diarrhea, but are usually contraindicated in constipation.

The Clinic, 122 North LaFayette Boulevard.

MANY doctors are complaining about the shabby treatment accorded by the federal government when professional services are rendered. One doctor who was asked by the Bureau of War Risk Insurance to make a lot of examinations of a technical character and spend a lot of time making out reports, had his very modest bill for services cut in two, after months of waiting and a lot of exasperating red tape in connection therewith which took more time and attention on the part of the doctor. As a final response the doctor informed the Bureau of War Risk Insurance that while he was in the army the government got his best services at great sacrifice and was in every way his boss, but now conditions are different and he does not propose to be the victim of imposition any longer and, accordingly, requested that no more professional work be referred to him by the Bureau of War Risk Insurance. In all probability the matter will be settled by the dictum "If you don't do the work for the fees that are offered, someone else will." Here is the crux of the whole situation. Someone in the medical profession is always ready to accept the offerings made by federal, state, or municipal governments, insurance companies, industrial and benevolent concerns. In consequence, doctors become objects of barter, though there is never any bartering against each other, for the reason that there always are doctors who will accept the compensation offered, no matter how low it may be. Some doctors say that the fees derived in this way are mere "velvet" added to the income from private practice and, therefore, should not be turned down. It is that sort of argument that leads to a general lowering of the standards of compensation for professional work, as it also paves the way for an increase in the socialistic plan of doing away with private medical practice. Certainly it is high time for medical men to appreciate this fact.

2. Abt: *Proc. Am. Ped. Soc.*; abstr. *J. A. M. A.*, July 10, 1909, p. 140.

3. Schütz: *Arch. of Verdauungskrankh.* VII.

4. Fleiner: *Jahresb. f. Aertzl. Fortbild.*, 1911, No. 3. Nickles: *Reference Handbook of Medical Science.*

5. Neilson and Hyland: *J. A. M. A.* 60: 436, No. 6 (Feb. 8) 1913.

6. Alvarez and Taylor: *J. Pharm. & Therap.* 10: 365, No. 5 (Nov.) 1917.

7. Mall: *Johns Hopkins Hospital Reports*, 1896, No. 1.

8. Kendall: *J. Med. Research* 25:117, 1912.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

OCTOBER 15, 1920

EDITORIALS

SHOULD THE MEDICAL PROFESSION ORGANIZE OR BE BOLSHEVIZED?

In an article on this subject by Dr. G. Frank Lydston, published in the September number of the *Illinois Medical Journal*, so many pithy things have been said that we feel justified in reproducing most of the article as presented. We frankly confess that we have not been in sympathy with all the various pugnacious attitudes assumed by Dr. Lydston, and yet when it comes to a recognition of some of the faults that lie with the medical profession he often "hits the nail on the head" and in such a spirited manner as to evoke interest as well as respectful consideration. That is especially true in his latest article on medical organization concerning which he says:

We are told that we must organize for defense against the rapacity of insurance companies, corporations, and like evil things. Isn't that amusing? What percentage of the profession is interested in such matters? What about a hundred different abuses of which the vast majority of the rank and file are victims? What about the doctors who serve the public, especially in various institutions, for nothing—and take a civil service examination for the privilege? Are not the insurance companies and big corporations, who pay next to nothing, at least as benevolent as public institutions that pay nothing? Speaking of "next to nothing," compare the salaries paid by our health department with the wages of the "white wings" who clean the streets. (Please do not drag the wages of bricklayers, plumbers, sewer builders and carpenters into the argument, and don't even mention the scrub women at the County Hospital.)

It is noteworthy that, whenever the public press quotes somebody or other as advocating a doctors' "union," certain medical men always break into print the next morning with profuse apologies and explanations, apparently fearing that the public may suspect that the medical profession has developed a tiny bit of "guts."

A profession that lacks self-respect and self-appreciation gets just about what it calls for, i. e., no respect or appreciation from others. That is why the medical profession has no

social, commercial, or political status worth mentioning.

Much of the danger that confronts the medical man is due to evil conditions within the profession itself. We doctors are egotists by cultivation, even though by nature we may not be unlike other folks. "Self-centered" is our "middle name." The exigencies of our vocation and our surroundings are responsible for this.

The average doctor has little brotherly feeling, and less consideration, for his co-workers, and does not care two whoops what happens to the profession so long as his own toes are not trodden on. Doctors have about as much *esprit de corps* as a gathering of cats on a tin roof. Their yowls and clawings and spittings are purely individualistic. Often, if the doctor is a great professor, he babbles to his younger brethren of ethics, professional dignity and brotherly love, until he "gets his'n," and then he tells the profession to "go hang" and fathers various schemes to impoverish it under the camouflage of the interests of "humanity" or the "dear public."

The profession has had the "dear public" and "love of humanity" stuff ladled out to it and has swallowed it for so long that it now has not the courage to confess that the practice of medicine is a vocation—in which one should be privileged to fight the battles of life on even terms with other men in other vocations, giving the public the best he can and getting the best reward he can.

The doctor is "jollied" by the public—and by the medical "tin gods"—just as some people have jollied the poor, by promising them mansions in the skies and assuring them that it is easier for a camel to go through the eye of a needle than for a rich man to enter the Kingdom of Heaven.

The poor man has taken "a tumble to himself." He has seen through the lie—he has discovered that, whatever difficulty the rich man may have in getting by St. Peter, he can go through some pretty small holes here on earth—without even "humping" himself—and can "get by" with almost anything. But has the doctor taken a "tumble"? He has—not.

Aggregations of doctors daily are getting together on the "welfare of humanity" and scientific stuff; they even will pull together in petty medical politics, but who ever heard of a body of medical men getting together and sticking together on any principle which promises to be of material benefit to the profession? How afraid we are of violating moss-grown traditions and offending certain ethical "bunk artists" and mawkish sentimentalists!

The doctor is the lowliest organism of which biology takes cognizance. Even the humblest nomad has the instinct of self-preservation. If the profession took half as much interest in self-protection as it does in enacting laws which

oppress reputable medical men, and repress quackery little if at all, it might help some. The medical practice laws of our various states may add to the gaiety of nations, but the spectacle of an experienced practitioner moving to another state, being compelled to submit to an examination for a license, is one for gods and men: "A mad world, my masters."

To see ourselves as some others see us:

A senator from New York state, during the hearing on the Davenport-Donahue Compulsory Health Insurance Bill, March 19, 1919, said: "You doctors are the dearest people on earth and we love every hair on your head, as individuals, but as a class you are pitiable! You spend your time and money and energy organizing and maintaining scientific societies for the advancement of science and the betterment of mankind and you do not know the first thing about the law of self-preservation. Go home and organize!"

We always have fancied that we had plenty of medical organizations, from county societies and local academies of medicine to our great national association, to which we have paid tithes without a murmur. But what have they done for us? Chiefly parcelled out offices and furnished "kitchens" for the private practices of the "willing workers" and distinguished "We have with us tonight" from out of town who happen to be solid with the program committee. I recall one of these gentry who came a thousand miles to teach us how to cauterize a hemorrhoid! And how edifying the discussion! On one occasion, two well known surgeons consumed twenty minutes each in telling us how grateful we should be for the obvious compilation with which we had been favored by the eminent Dr. Fizz. Then there are those wonderful "original" papers, to which the author (sic) contributes nothing but his name!

The nearest approach to doing something for the general professional weal by our national association was the recent attempt of a "hand-picked" president and "ethical" exemplar (sic) from the East to foist compulsory health insurance on the profession. Did the "hand-pickers" really want to repudiate the aforesaid "beauty bright"; did they smell revolution in the air—or have some folks really begun to see the light? I wonder.

What Shall We Do to Be Saved? Possibly, it is too late to do much, but it is worth trying, for, if the profession does not wake up, the practice of medicine as an independent vocation soon will be a thing of the past. Heaven help science and the "dear public" both, when that evil day comes!

Here are some of the things that we should do:

1. Swat compulsory health insurance whenever and wherever it raises its venomous head.

2. Swat appropriations for such schemes as the proposed \$15,000,000 group of state hospitals and laboratories for Illinois. Do not let "special pleaders," i. e., job holders, job seekers and men who are ambitious for personal glory at the expense of the profession, fool you.

3. Swat that lovely scheme to induce the U. S. government to assume charge of all the venereal practice in America. If the government ever should assume control, and showed the same degree of intelligence and efficiency as in the recent war, heaven help the country!

4. Swat the scheme for a big appropriation by the government for "advancement of medical science." It does not require more than one guess to determine who would "run the show" and spend the money. (Still, I "dunno." Two factions are after it.) Government control would mean medical "gang" control. The "advancement of medical science" sometimes masks much self-seeking and unholy medicopolitical ambition.

5. Swat the scheme for a medical cabinet officer—swat it twice. It would mean more "gang" stuff.

6. Swat, and swat hard, every medical man who accepts without pay, state, municipal and government jobs. They can be swatted easily enough. "Blacklist" them and cut off their "referred work" and watch them take to the "tall timber." Also, fire them from our medical societies. A certain state representative, speaking of doctors, recently said: "Hell! We can get all them fellers we want for nothin'."

7. Establish some sort of a salary and fee standard for public and corporation service, and make our society members live up to it—the profession should not be content with crumbs from the public and big business tables. In brief, show a little of the *esprit de corps* of the hod carriers' unions. Incidentally, let the doctor stand by the doctor—less knocking and more boosting of the profession, for the profession and by the profession.

8. Cease wearing that mawkish, hypocritical camouflage of the "dear public" and admit that medicine is a vocation, the practitioners of which are as much entitled to a fair show in the struggle for existence as are those of any other. Less "dear public" and more "dear doctor" is in order. If we must go on in the old way, then let us demand consistency on the part of the "dear public." (Imagine how your landlord, grocer, butcher, shoemaker, et al.—to say nothing of the tax gatherers—would howl at this!) The medical profession always has, and always will, do more than its share of charity work, but it is high time it ceased doing the other fellow's.

The doctor should demand a fair chance in the battle of life. It may be a generous world,

but all the same, if the skies ever should rain soup, the business man would be handed a bowl—the doctor a two-tined fork.

The dear public demands so much of us and so little of the quack, that it is a wonder that so few medical men depart from the straight and narrow path—the more especially as certain medical men in high places “put over” such raw stuff.

9. Babble less of ethics, that boggy man devised by the monopolistic medical “Wiseheimers” to frighten the medical babies, and devote less attention to medical politics and more to the “garden” variety. Votes, votes and more votes—these are the only arguments that your legislator will listen to, except—well, something of which the quack and the patent medicine man, and some other people seem to have plenty—when legislation adverse to them is in prospect. A highly cultured member of the Illinois state legislature once remarked: “If youse guys wanta put anything troo, ye gotta kiss it troo.”

We need more medical men in politics—of the kind who will be loyal to the profession. And let us so conduct ourselves that entering politics does not spell professional ruin for the doctor.

MEDICAL ORGANIZATION FOR ECONOMIC PURPOSES

We still maintain that brains are about the cheapest commodities that can be bought, and medical brains bring up the rear. As an evidence of this stop to consider the salaries paid to medical officers connected with national, state, municipal or industrial enterprises, and note the number of men who almost climb over each other in efforts to secure positions in those enterprises. Look also at the fees awarded by insurance companies, benevolent associations, and industrial boards for medical services which are the highest type of technical services that can be rendered, and then compare those fees with the fees or salaries paid for almost any other kind of labor. Even common laborers like sewer diggers, janitors, and scrub women regularly earn more money in a year than the average doctor, and mechanics beat the record by a mile.

Really the situation is pathetic, so far as it pertains to the average medical man, but the victim has no one to blame but himself, for his condition is not bettered because he fails to advocate and support organization and organization methods among his confrères. “United we stand, divided we fall,” applies to the members of the medical profession as well as it applied to the American colonies in Continental times. Banded together as one in aims and

purposes we can accomplish much for our own betterment and for the good of the public at large, but there is altogether too much mawkish sentimentalism, blind worship of the ethics fetish, and misplaced benevolence on the part of our medical men, to say nothing of a tendency to individual self-satisfaction and a desire to get away from taking the initiative in enterprises that have for their purpose improvement in the general welfare of the profession.

The practice of medicine is a profession, but it also is a vocation. The laborer is worthy of his hire, but he never will secure proper recognition until he forces it by his individual efforts. Few individuals get more than they demand and seldom have anything handed to them “on a silver platter.” The laboring people of this country lived from hand to mouth until they organized and established their unions which secured recognition of their demands, and today they hold a controlling influence over capital and industry. What labor has accomplished has been through organization, and fidelity to organization. What has been accomplished by the laboring people can be accomplished by medical men, and the sooner we recognize the fact that medical men must organize and show fidelity to organization, and use that organization for material as well as professional advancement, the better it will be for us all. Unless we see the “hand writing on the wall,” and seek the proper relief, we are doomed to destruction within the next few years and will cease to be a profession. We are headed for a position of vassalage, and with it destruction of our social and economic independence. The experience of Germany, where private practice has been abolished almost entirely, and the experience of England, where private practice for most of the medical men has been reduced to a point where incomes are less than the ordinary mechanic, is an indication of what may and will happen in this country unless we do something for self-preservation.

Our unsatisfactory relationship with insurance companies, industrial organizations, industrial boards; and medical positions connected with the federal, state and municipal governments, as well as benevolent institutions, so far as remuneration is concerned, should receive earnest consideration on the part of organized medicine. In Indiana our committee on Industrial and Civic Relations of the Indiana State Medical Association should make investigations and offer recommendations which, when approved by the Association, should be carried out to the letter. We always have and always

will be charitable, but this idea of being charitable to states or municipalities, and practically donating services to rich corporations, is something that should be stopped.

Likewise, much of this "uplift" propaganda which seeks to furnish gratuitously skilled and highly technical medical and surgical services to practically any who may ask for such attention, should receive no support from the medical profession. If incentive and initiative in medicine and surgery is to be preserved, and if we are to continue to have real scientific advancement, with all that it means for suffering humanity, then we must turn a deaf ear to this paternalistic preaching that is getting so common today and has the approval of certain medical men who are in a financial position to use the practice of medicine as a recreation instead of a vocation.

We should adopt standards for everything pertaining to the practical phases of the practice of medicine and then live up to those standards to a man. Those who do not live up to the standards should be dealt with in such a way that their lives will be a burden until they support the aims and objects of the profession.

The time for thinking is over. It is now time to act!

PHYSICAL THERAPY

The action of the House of Delegates in recommending that the trustees of the Indiana University establish a department of physical therapy in the Indiana University School of Medicine meets with general approval. The regular medical profession always has recognized the value of psycho and physical therapy, but never has and never will consider those methods of treatment adaptable to every ill that flesh is heir to, as do the Christian Scientists, osteopaths, chiropractors, and a number of other of the newer cults supposedly established to emphasize the value of such limited treatment but in reality taken up by the mentally warped as well as those who desire to secure a short cut to the privilege of practicing medicine and securing fat returns from a gullible public. However, whatever virtue there is in psycho as well as physical therapy can now be determined and emphasized through courses that will be established and supervised by the University, and it ought to lead to a recognition of the fact that these branches of medical teaching are not entitled to and never will be entitled to recognition as distinct schools of medicine. In fact, it ought to bring about a realization of the

truth, as expounded by all members of the regular medical profession, that no one can practice medicine intelligently and successfully nor should he be permitted to prescribe for or treat the sick and suffering without being trained in all of the various branches of medical science, of which physical therapy plays a very minor part.

There is absolutely no reason why there should be a variation in requirements for treating the sick. It is a self-evident fact that a good preliminary education, of which not less than two years should be university training, should be the requisite of any person desiring to practice medicine. Another very essential requirement is a comprehensive knowledge of anatomy, physiology, pathology, bacteriology, physical diagnosis, together with teaching and practical experience in recognizing diseased and abnormal conditions of the human body. This knowledge cannot be acquired in a few weeks or even a few months' time, but requires at least four years of intensive study. Men may differ as to the therapy to be applied to any given case, but there are certain well established scientific truths concerning the etiology, symptomatology, and progress of disease which intelligent physicians are all agreed on and which must be learned but cannot be acquired in the limited time devoted to the subject by some of the newer schools of medicine. In fact, when once intelligent students have had the training required by our better medical schools they at once understand the limitations of physical therapy as employed in osteopathy and the newer off-shoot, chiropractic, and the utter absurdity of dignifying these branches of our art, no matter how well developed they may be, as separate schools of medicine. We readily recognize and can prove that the seat of all disease is not in the mind, or in a dislocation of some of the vertebrae, or due to pressure on some part of the nervous system, and that, therefore, therapy must be broad enough to include psychic treatment, mechanical manipulations, the use of pharmaceuticals and biologic products, or the application of surgery, depending on the cause of the disease or abnormality, in order to effect relief.

An analysis of the subject should show conclusively to any thinking person that a broad knowledge should be required of every one who desires to treat diseased or abnormal conditions of the human body. Once possessing a comprehensive knowledge of the human body in health and disease, therapy will be and should be a

matter of individual choice. Therefore, restrictions governing the practice of medicine should apply to each and every person alike and without discrimination. In fact to permit the chiropractors to practice medicine when they start out with only an ordinary school education and but a limited training in the recognition of disease, which education has been acquired with but a few weeks or at most a few months of training, is class legislation of the rankest sort and probably would be proven unconstitutional if contested in the highest courts of the state.

Whatever truth there is in the teaching of these newer cults is deserving of recognition, as far as consistently and intelligently possible, but they should not be given credit for something that they cannot accomplish. The establishment of a course in physical therapy at our university should determine the limitations of one or two of the cults that pin their entire faith on physical therapy as a means of relieving diseased and abnormal conditions of any kind no matter as to kind or location, and it ought to help us to solve our problems as to medical licensure.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

DR. DAVID B. ROSS, Indianapolis, is the incoming president of the Indiana State Medical Association.

THE next session of the Indiana State Medical Association will be held in Indianapolis on Wednesday, Thursday and Friday, Sept. 28, 29 and 30, 1921.

SECRETARY COMBS reports that the registration at the South Bend Session of the Indiana State Medical Association was over 400, which was one of the largest ever recorded outside of Indianapolis meetings.

DR. G. W. H. KEMPER, Muncie, the venerable and genial historian of the Indiana State Medical Association, has recovered sufficiently from his recent illness to leave the Methodist Hospital at Indianapolis where he was confined for so long, and attended the South Bend Session of the Association where he took an active part in the various programs. However, his health is in such a condition that he feels the necessity of getting away from our rigorous winter and accordingly will leave soon for California where he expects to remain until next spring. The cordial best wishes of a host of medical and lay friends in Indiana will go with him.

"HEADACHE AS A DANGER SIGNAL," is discussed by Dr. A. E. Herr in a recent issue of the *Western Medical Times*. He takes the position that the majority of headaches are of that class which have their beginning in wrong living and wrong habits, and that the correction of the irregularity will relieve the headache. He says: "Headaches are useful. They are only the red flags hung out as a sign that some organ is functioning abnormally. They are not diseases but always symptoms. A headache has virtue because it leads you to search out the causative factor. It is not an enemy but a friend."

DR. W. N. WISHARD of Indianapolis, chairman of the committee on Public Policy and Legislation of our Association, has proposed that we have a medical registration law whereby every person who practices medicine in Indiana shall be required to register once each year, the fee for same being \$2, in order that the State Board of Medical Registration may keep a record of the standing and movements of those who are practicing medicine in the state, and, furthermore, have a fund, obtained from the fees, for the purpose of aiding in the prosecution of violators of the medical practice laws. It is to be hoped that some such law may be passed at the coming session of the Indiana legislature.

IN submitting copy for his article on "The Triumphs and Dangers of Specialism," for the October number of THE JOURNAL, the fifth of this special series, Dr. Frank B. Wynn has the following to say: "I may seem a little severe in my arraignment of specialism, and yet I have tried to play fair. If my specialist friends feel that I have been a little severe, let them wait and read what I say about 'The General

Practitioner' in the next issue." These special articles by Dr. Wynn are exceedingly interesting, and his manner of presenting these various subjects is proving helpful and uplifting to the readers of *THE JOURNAL* who look forward from month to month to the opinions and advice of this man of experience and ability.

ON the whole the South Bend Session of the Indiana State Medical Association was creditable from every point of view. For the most part the papers were excellent and read to large and appreciative audiences. The unusually hot weather, for the latter part of September, had a tendency to dampen the enthusiasm of some, but the programs were completed and, with few exceptions, discussions carried out according to schedule. The House of Delegates did nothing startling and aside from transacting the usual business, consisting in the approval of the reports as printed in *THE JOURNAL*, and the election of officers, it took little action out of the ordinary. The same is true of the Council. The South Bend medical men were hospitable hosts and did much to add to the pleasure of those attending the session.

It is an old story but we desire again to remind readers of *THE JOURNAL* that notification concerning change of address or failure to receive copies of *THE JOURNAL* should be sent direct to the editor of *THE JOURNAL* and not to the secretary of the county medical society or the secretary of the state medical association. Attention also is called to the inexcusably bad postal service we are having at the present time. Not in many years have we experienced so many delays, and other inefficiencies of service, to say nothing of actual loss of mail. This, therefore, is another reason for possible failure to receive copies of *THE JOURNAL* regularly even when entitled to the same, but any and all subscribers may count on having mistakes rectified and duplicate copies furnished whenever request for such attention is received at *THE JOURNAL* office.

THE public should be educated concerning the necessity of requirements for the practice of medicine, and what the requirements are in Indiana. A clean statement of fact concerning the matter will serve to create sentiment in favor of a rigid adherence to the law covering the requirements, and materially aid in stamping out the incompetents and quacks who have not

met the requirements. At present prosecution of offenders is difficult because the courts and the public are ignorant of the situation and what it means to have the medical practice act ignored. A series of articles dealing with this subject, as well as many other subjects connected with the intelligent practice of medicine, published in the daily papers under authority of the Indiana State Medical Association, would have great influence in moulding public opinion, and the regular medical profession ought to be the sponsor for some such propaganda. Our Committee on Medical Education might with profit consider the subject.

THE lack in our medical schools of today of efficient and intensive training in diagnostic methods as pertains to tuberculosis was given lengthy discussion at the annual meeting of the Mississippi Valley Tuberculosis Conference held in Duluth, September 2 to 4, and covering the subject, the following resolutions were adopted:

WHEREAS, There is no class of invalids more numerous or more neglected than those suffering from tuberculosis; and

WHEREAS, Many physicians pay too little attention to the diagnosis of this disease and are depending on methods which are not sufficiently accurate for making an early diagnosis; and

WHEREAS, Tuberculosis is only curable with any reasonable degree of certainty in its early stages, thus making an early diagnosis a most important factor in its successful treatment; and

WHEREAS, This unfortunate condition of affairs is largely because medical colleges have failed to recognize their duty to their students and the public in providing more efficient and intensive training in diagnostic methods; therefore be it

Resolved, By the Mississippi Valley Conference, that medical colleges are hereby requested to give this important subject a more conspicuous place in their curriculum. That we also recommend the establishment of clinics for the instruction of physicians now in practice, and to this end we urge the colleges and clinics to avail themselves of the facilities which are afforded by the numerous sanatoria now in existence and which are rapidly being constructed; be it further

Resolved, That a copy of these resolutions be sent to all medical colleges in the territory embraced by this Conference.

THE general consensus of opinion among medical men attending the South Bend Session was that more attention should be paid to politics by the average medical man, and to that end the recommendation was made in the House of Delegates that all doctors should lend a helping hand to the Committee on Public Policy and Legislation in efforts to uphold and improve the

existing laws concerning medical education, and requirements for the practice of medicine within the state. The election of legislators who are either opposed to medical progress or in favor of lowering our present medical standards may mean a change in our existing laws which will prove detrimental to the best interests of the public, to say nothing of being unjust to those medical men who now are required to comply with rigid requirements before beginning the practice of medicine within the confines of the state. While it may be distinctly class legislation to pass a law which favors one class of individuals in the practice of medicine, and perhaps a law which gives varying standards for the practice of medicine may be unconstitutional, yet what we must do is prevent the enactment of any laws with varying requirements, and every one should be interested in upholding if not improving on the present standards. The best way to do this is to use judgment in the selection of our legislators, and while we may have been remiss in not watching the primaries closely enough there is no excuse for not watching the ballot and trying to defeat those candidates who are known to be antagonistic to our cause.

In a paper presented before the annual session of the American Proctologic Society, Dr. Alois B. Graham of Indianapolis, president of the society, brought out the following points in his experience in the "Treatment of Internal Hemorrhoids":

ABSTRACT.—Careful preoperative preparation is essential, and should be the same regardless of the operation of choice, the anesthetic used, and the place where the operation is to be performed. The best results imply careful preoperative preparation. Soap water enemas, because of their irritating effects, have been abandoned. The same is true of high enema and the colon tube. Normal salt solution enemas given through a soft rubber catheter secure satisfactory results. No preoperative dressings are applied nor are the parts shaved except in cases where large external hemorrhoids are to be excised. The iodine-alcohol method of sterilization is employed.

Preliminary narcotics, hypodermically, one-half hour previous to the scheduled operation are a routine preoperative procedure. Nitrous oxid combined with oxygen is the anesthetic of choice. Local anesthesia preferred to either ether or chloroform. If the injection method is used quinin and urea are preferred to carbolic acid. For radical removal, the ligature method is the operation of choice. No. 2 chromic catgut for the ligatures meets all requirements. This method secures an absolute cure, is as free from danger as any surgical method devised, and can be performed under either local or general anesthesia. No rectal plug of any kind is used. Gauze impregnated with sterile vaseline is kept in contact with the

anal region. It is essential that postoperative pain be relieved and this is one of the most important services that can be rendered by the surgeon to his patient.

Dressings are removed and the parts cleansed twice daily. Olive oil and normal salt solution enemas, given through a catheter, employed for emptying the bowel on the third and fifth day. Catheterization, if necessary, is a standing order. The average confinement to bed is five days. Until a complete cure is effected, the finger protected and well lubricated is introduced weekly into the anal canal to ascertain that no postoperative contraction has resulted. The average time for a cure is three weeks. These surgical methods of choice are the result of the writer's personal experience in 1,200 cases where radical operations for the cure of internal hemorrhoids have been performed.

THE *Journal of the Michigan State Medical Society*, slightly smaller than our own JOURNAL, has a subscription price of \$5 per year and in the September number calls attention to the fact that within a period of two years the cost of publication has not only trebled but bids fair to increase still more before the first of the year, and that there is real cause for worry over the situation. With much propriety we can reiterate this statement concerning our own JOURNAL, and we point with justifiable pride to our ability up to the present date of keeping the cost of publication within the income derived from subscriptions and advertisers, and it should be a matter of congratulation to members that the net cost to them is less than the net cost to the members of any other state medical association for their journal. The reason that this has been made possible is that the increasing advertising income has been sufficient to cover the increasing cost of publication. Accordingly we desire to call the attention of members of the Association to the fact that inasmuch as advertising income plays such an important part in maintaining THE JOURNAL, the members should see to it that advertisers obtain the worth of their money through increased patronage from Indiana doctors. We know that for the most part doctors are selfish and pay little attention to anything which indirectly affects them, but they must get away from the long established habit of looking only to the immediate individual needs and never paying any attention to anything else or even their own needs of the future. Many Indiana doctors patronize THE JOURNAL's advertisers but do not take occasion to let the fact be known, even though a word to that effect would prove beneficial to all concerned. On the other hand, there are many Indiana doctors who give their patronage to concerns that have absolutely no interest in the Indiana medical profession ex-

cept to get all they can out of it. We maintain that all things being equal, the members of the Association who are interested in continuing *THE JOURNAL* and maintaining its present standard should patronize *THE JOURNAL*'s advertisers, and especially so at this particular time, when the cost of publication is three times what it was a few years ago and bids fair to be still greater. There ought to be a general response to our request to help swell the income by an increase of advertising through a patronage that should be given advertisers by the members of our Association.

THE Journal of the Arkansas Medical Society points out one or two reasons for compelling physicians to obey the law as regards registration of births which we do not usually consider when discussing the subject, and in view of the fact that the ignoring of this law is practiced as much in Indiana as in Arkansas, we reproduce the editorial herewith:

THE STORK AND THE REAPER.—At Warrensville, N. C., a physician was fined \$50 and cost in each of two counts for failing to report births. It was the heaviest fine ever inflicted by that particular court and it was made heavy because he had been convicted previously and repeated efforts to induce him to obey the law had failed.

One may ask, "What concern is it of ours that a physician away off in North Carolina has to pay a fine?"

It is our concern merely as it serves "to point a moral and adorn a tale." We are informed that Arkansas is also suffering from continual ignoring of the same law; nor does there seem to be any intelligent effort to enforce the law. The published vital statistics show the Grim Reaper more industrious than the stork in the most populous county of the state. Put the case to yourself. Suppose you have an idea of locating elsewhere. Suppose you have a choice of location and then you come across statistics which show you that the place you have selected has annually more deaths than births. Would you move to such a place? It is in the effect, the deterring effect on immigration of desirable citizens, that such published statistics may have, that Arkansas suffers—to what extent none may say. We at home know well that the true figures would show a normal preponderance of births over deaths. People elsewhere who read the statistics will take them for granted as correct.

These false statistics go out simply because of the negligence of some physicians. A few salutory fines, a consistent effort to enforce the law, would go far toward remedying this condition. The law requiring registration of births is as much a law as the law providing penalties for murder and robbery. Yet the physician who fails to obey this particular law would be deeply offended if accused of being a law-breaker—nevertheless that term describes him accurately.

There is still another reason why the profession should be very particular in observing the law in

promptly reporting births. It has to do with health conditions in the ratio of births to deaths are obtaining. If the births do not show their normal proportions, then something is wrong which should be righted. In default of correct statistics there is no foundation for ascertaining the facts. Strenuous efforts are being made by government and state health officers to get the whole of Arkansas into the vital statistics area. But it does not look well that this or any other county supposed to keep statistics, and having laws to enforce correct reports, should make so bad a showing.

THE chiropractors, through their bureau of publicity, are mailing broadcast a pamphlet dealing with the cause and treatment of tonsillitis, from which we copy the following absurd and misleading statement:

"Adenoids, or soft tumors found in the nasal passages, while located in a different situation of membrane than tonsillitis and quinsy, have the same cause. All are due to pressure against the nerves by displaced bones of the spine, which intereferes with the passage of vital force from the brain, causing too much heat in the parts and they become sore and inflamed. Chiropractors are successful in restoring the victims of these complaints to full health without drugs or operations."

Aside from the spelling, faulty diction and grammatical errors, also found throughout the body of the pamphlet, thus attesting the general illiteracy of the cult, the crass ignorance concerning the subject itself, thus heralded to a gullible public, is quite sufficient argument in favor of an effort to educate the public concerning the necessity of not only having adequate medical laws for the protection of the public against such ignorance as exemplified in the circular to which attention is called, but also indicates the necessity of enforcing the medical practice laws in order to protect misguided individuals who may be led to believe the propaganda that is so widely distributed. This leads us to the query—what is the regular medical profession doing to educate the public concerning, for instance, just such subjects as that which forms the title of the chiropractic pamphlet that is being distributed? The quacks, and the medical pretenders of every sort, perhaps sailing under the colors of what they seem proud to call a new school of medicine, go to much trouble and expense in preaching their doctrines to the public. It matters not that the doctrines are based on false premises and the rankest kind of ignorance, they very frequently fall upon fertile soil, and yet, we, the members of the regular medical profession, surrounded

by our cloak of ethics and our "holier than thou" halo, sit idly and permit the public to be made the victims of such ignorance and duplicity. If we ever gain anything in our fight against superstition and ignorance it will be through the education of the public, and unless we do something to offset the vicious education of the public that comes through such propaganda as that to which this note calls attention, we must expect rational and intelligent thought and action concerning the practice of medicine to decrease.

THE Nujol Laboratories (Standard Oil Company) have been securing a vote of all members of the medical profession concerning the choice of the most eligible of those physicians who have been nominated for the Hall of Fame. It is unfortunate that it remained for outsiders to take this action, as it also is unfortunate that so little interest is taken in the matter. In fact it is a matter of discredit that the medical profession has put forth so little effort to have one of its distinguished men represented in the Hall of Fame. This year twelve medical men have been nominated for election. Election is held every five years, and although the selection is not, though it should be, left to the members of the medical profession, the opinion of the medical profession probably will have great weight in the decision. Therefore, it is hoped that a very large number of doctors will respond to the request for an opinion. Those selected for the Hall of Fame must have been dead ten years, and the twelve names of medical men nominated are as follows: Ephriam McDowell, pioneer surgeon of Kentucky, who performed the first successful ovariectomy; James Marion Sims, Alabama surgeon whose name is borne by the speculum, the gynecologic position, and the operation for fistula; Lyman Spalding, the originator of the first United States Pharmacopeia; Walter Reed, major in the United States Public Health Service, who did epoch making work in demonstrating that yellow fever is carried by the mosquito and typhoid fever by flies; Benjamin Rush, founder of the first dispensary in America, and known as one of the greatest of America's pioneer physicians; William T. G. Morton, one of the four whose right to fame is based on the discovery of general anesthesia and who was the first to demonstrate and proclaim the advantages of sulphuric ether in producing anesthesia; C. T. Jackson, the one who suggested to Dr. Morton the use of sulphuric ether; Crawford W. Long, thought by many to be entitled to the credit of having first anes-

thetized a patient with ether; William Tillinghast Bull, famous as a surgeon in the treatment of intestinal gunshot wounds, appendicitis, hernia, and other surgical subjects; Frank Abbott, principally noted as a dental educator and as one of the founders of the New York College of Dentistry; William Shippen, Jr., intimately associated with early medical history of America and especially medical teaching; John Murray Curnochan, celebrated as a skilful surgeon with many original operations to his credit and distinguished as a teacher of medicine. The names of 177 men and twenty-seven women have been nominated for the Hall of Fame by the senate of New York University, and 100 representative Americans as electors, selected from university and college presidents, scientists, historians, jurors and public officers. Five names are to be chosen from those placed in nomination, and the decision will rest with the senate of New York University. While as yet no member of the medical profession has been selected for admission to the Hall of Fame, it is hoped that this year one of the twelve names of medical men placed in nomination may be selected, and we await with considerable interest the decision of the electors which will be announced sometime after October 15.

DEATHS

OBEDIAH H. GARRETT, M.D., aged 62 years, died recently at his home in Cadiz. Dr. Garrett was graduated from the Medical College of Indiana, Indianapolis, in 1883.

HARRY J. HELFRICH, M.D., formerly of Crawfordsville, died recently at his home in Mount Pleasant, Calif., aged 54 years. Dr. Helfrich was graduated from the University of Louisville Medical Department in 1896.

GEORGE H. McLIN, M.D., aged 77 years, died at his home in Huntington, August 17. He was graduated from the Hahnemann Medical College and Hospital of Philadelphia in 1871.

AARON H. HASTINGS, M.D., aged 78 years, died September 2, at his home in Muncie. Dr. Hastings was graduated from the Hahnemann Medical College and Hospital of Chicago in 1887 and has been a practicing physician in this state for thirty-five years.

JOHN A. SIPE, M.D., Carthage, died August 20, aged 48 years. Dr. Sipe was graduated from the Missouri Medical College at St. Louis in 1894, and was a member of the Rush County Medical Society and the Indiana State Medical Association.

HARRY HUSTON LONG, M.D., Laporte, died September 13, aged 58 years. He was graduated from the Rush Medical College in Chicago in 1893, and was a member of the Laporte County Medical Society, the Indiana State Medical Association, and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. A. E. EDMONDS of Valparaiso has removed to Riverside, Calif., for the practice of medicine.

THE MAX WOCHER and Son Company will be represented in Indiana from now on by Mr. Joseph A. Buchmeier, salesman.

RADIUM.—\$250,000 worth of radium has been purchased by the state of New York, to be held as a state asset for medical use.

DR. R. J. HARVEY AND DR. ELMER D. JOHNS of Zionsville have formed a partnership for the practice of medicine in that city.

DR. AND MRS. J. A. FREEZEE of Bunker Hill have just returned from a 400 mile auto trip through northern Indiana and Michigan.

THE Canadian Society of Anesthetists was recently formed, with the object of promoting the science, practice, and teaching of anesthesia.

DR. J. M. BIDDLE of Battle Ground is a patient at the St. Elizabeth Hospital, Lafayette, where he underwent an operation for appendicitis.

DR. JAMES RAWLEY of Brazil underwent an operation for the removal of the appendix on August 17. His condition has continued favorable.

THE Chicago Polyclinic is endeavoring to raise funds for a hospital building, to be erected on a site adjoining the present Henrotin Hospital.

DR. H. R. ALLEN of Indianapolis will leave on November 4 for Tampa, Fla., where he will spend the winter, returning to Indianapolis about April 1, 1921.

THE honorary degree of Doctor of Science has been conferred on Dr. Hermann M. Biggs, health commissioner of New York state, by Harvard University.

THE County Tuberculosis Sanitarium, 6 miles south of Richmond, is the recipient of a gift of \$42,000 in liberty bonds, for the construction of a hospital at the sanitarium.

THE Harvard Medical School is the recipient of a gift of \$350,000 for the development of psychiatry and \$300,000 for the teaching of obstetrics, from the Rockefeller Foundation.

LIEUT.-COL. WILLIAM DUNBAR SUTHERLAND, imperial serologist to the government of India and formerly editor of the *Indian Medical Gazette*, died June 27, in Calcutta, at the age of 53.

DR. AND MRS. F. A. MALMSTONE of Griffith have just returned from a two-weeks cruise on the Great Lakes, stopping at Mackinac Island, Parry Sound, The "Soo Canal," Hancock and Duluth.

DR. AND MRS. MILES F. PORTER of Fort Wayne returned September 25 from an extended trip through Europe. While there Dr. Porter attended an international meeting of surgeons.

PROF. WILHELM WUNDT died in Leipsic on August 31, aged 88 years. Professor Wundt held the chair of philosophy at Leipsic, where he had founded an institute for experimental psychology.

DR. JOHN J. KYLE, formerly of Indianapolis, died in Los Angeles, Calif., August 29. Dr. Kyle had been ill for some time but his death was caused by pneumonia contracted within the last few days.

DR. FLETCHER M. GARDNER of Bloomington has been appointed a major in the U. S. Army. Dr. Fletcher was a surgeon in the World War, but has been practicing medicine in Bloomington since the war.

TRAINED nurses in South Bend have raised their rates to \$6 a day for general and obstetrical cases and \$7 a day for contagious cases. One dollar a day extra will be charged for each additional patient in a household.

TWENTY buildings of the former United States Base Hospital No. 1, now abandoned, in the Bronx, New York City, were destroyed by fire on the night of September 2. The damage is estimated at \$20,000.

DR. JOSEPH ADAMS of Indianapolis, aged 72, has been convicted on the charge of performing an illegal operation, and has been sentenced to serve from three to fourteen years in the Indiana state prison and pay a fine of \$1,000.

THE Lafayette Society for the Prevention of Tuberculosis is circulating a petition in several counties asking for the establishment of a joint county hospital for the care of tubercular patients in Tippecanoe, Benton, White and Warren Counties.

DR. J. A. SAARI, formerly of Presbyterian Hospital of Chicago and Children's Memorial Hospital of Chicago, has joined the Terre Haute Clinic of Terre Haute, Ind., and has taken charge of the newly established department of pediatrics.

DR. EDOUARD J. DUBOIS, of the Indianapolis city health department and a captain in the medical department of the Rainbow Division, has recently been cited by the French government for brave deeds which were accomplished over two years ago.

DIPLOMAS were presented to the six members of the graduating class of the training school for nurses at Dr. W. D. Fletcher's Sanatorium, on August 18. Addresses were made by Dr. Jane Merrill Ketcham and Dr. W. F. Hughes at the graduating exercises.

A FREE clinic for the treatment of tuberculosis patients who are without adequate funds has been established by the board of public

health at Indianapolis in the Free Tuberculosis Clinic. The free clinic will be kept open Tuesday and Friday evenings.

THE Pellagra Hospital at Spartanburg, S. C., maintained by the U. S. Public Health Service, has been discontinued because the disease has been practically wiped out in that locality. The equipment will be distributed among other hospitals of the Public Health Service.

THE Washington County Medical Society, after a lapse of several months, has resumed activity again and a meeting was held September 8 at Salem. Officers for the coming year were elected as follows: President, Dr. J. I. Mitchell; vice president, Dr. L. W. Paynter; secretary, Dr. I. E. Huckleberry.

THE Good Samaritan Hospital, Vincennes, is to have several new additions. A new wing is to be added at the south of the hospital building, similar to that which was constructed at the north end a few years ago, and enlarging of the wards is also under way. A new home for nurses is to be erected east of the hospital.

THE eighth annual session of the Mississippi Valley Conference on Tuberculosis, which was held September 2, 3 and 4, was attended by thirty delegates from Indiana. At this meeting a great many important projects were discussed, such as the Christmas seal sale, open air schools, the modern health crusade, industrial hygiene, tuberculosis clinics and nutritional clinics.

DR. FRANK F. HUTCHINS, neurologist, of Indianapolis, who held the rank of lieutenant-colonel in the recent war, has been appointed medical director and superintendent of the new national sanitarium for the treatment of disabled soldiers of the World War at the Marion Soldiers' Home, and assumed duties on October 1. The Marion Sanitarium will be the largest psychiatric institution in the world.

DR. F. S. CUTHBERT has located in Kokomo for the practice of medicine, after spending a year in New York City taking postgraduate work in eye, ear, nose and throat at the New York Post-Graduate Medical School, from which he graduated. Dr. Cuthbert was also connected with the New York Eye and Ear Infirmary and the New York City Free Dispensary during his work in New York.

THE Fourth Roll Call of the American Red Cross will be held during the two weeks from November 11 to 25. During that time all of the 10,000,000 members who joined last year will be asked to renew their memberships, as an expression of their faith in the ideal of service for which the Red Cross stands, and as an evidence of their desire to help carry out the after-war public health program of the organization.

THE Physicians and Surgeons Adjusting Association of Kansas City is issuing engraved membership certificates to its members. These certificates are suitable for framing and hanging in offices, and entitle physicians to all the benefits and privileges of the Association, being a protection against delinquents. A physician automatically becomes a member of this association by sending in a list of accounts for collection.

PLANS are under consideration by state officials for the erection by New York state of a hospital for insane soldiers, the hospital to be operated and maintained under the supervision of the War Risk Insurance Bureau. In the state of New York there are about 900 former service men who have become insane. The need of the proposed hospital is evidenced by the overcrowded condition of the state hospitals for the insane.

SPIRITUOUS liquors are not to be used in the future by the medical department of the Navy, according to an order recently promulgated by the Bureau of Medicine and Surgery. The order states that when whisky is no longer available and a medical officer deems alcoholic stimulation absolutely essential for the preservation of human life, the ethyl alcohol obtainable from supply officers may be prescribed. No further purchases of liquor are to be made.

THE Bureau of Internal Revenue, which is charged with the administration of the Harrison Antinarcotic Act, will not lend further indorsement to public clinics for the treatment and cure of drug addicts inasmuch as the net results obtained through the operation of such public clinics appear to have demonstrated conclusively that the cure of drug addiction through such means is a failure, and that hereafter no similar institution shall have the indorsement of the Bureau.

DR. ARTHUR E. GUEDEL of Indianapolis presented a paper, "Third Stage Ether Anesthesia," before the joint meeting of the Pennsylvania State Medical Association, the Interstate Association of Anesthetists, and the National Anesthesia Research Society in Pittsburgh on October 7. For this paper he was awarded one of the second prizes offered by the Research Society for anesthesia research work of the year. Dr. Guedel was made vice-chairman of the Interstate Society of Anesthetists, which office succeeds to the chairmanship next year.

ACCORDING to the report of the Rockefeller Foundation for 1919, just from press, \$1,467,713 was spent in public health work during the year; \$3,248,547 for medical education and research; \$2,772,847 for war work; \$7,760,355 spent for miscellaneous purposes, including payments on pledges and administration. The book values of the principal funds of the Foundation, which were invested in stocks and bonds, as of Dec. 31, 1919, amounted to \$174,186,828. The value of the Foundation's lands, buildings, and equipment as of Dec. 31, 1919, was \$4,994,465.

BUBONIC plague is present in five seaports of the United States, according to a report made before the forty-ninth annual meeting of the American Public Health Association, held in San Francisco. In an address to the Association, Dr. W. H. Kellogg of San Francisco says that the plague is present in New Orleans, Galveston, Beaumont, Pensacola and Port Arthur, as well as in Hawaii and Vera Cruz. Dr. Kellogg goes on to say that the plague is carried by rats on ships and enters a new territory by way of the seaports, and the only way to check and eradicate the plague is by launching an extensive warfare against rats in all seaports whether or not infected with the plague.

A TONSIL CLINIC has been established by the Rochester Dental Dispensary at Rochester, N. Y., for the removal of diseased tonsils and adenoids among the children of Rochester and Monroe Counties, N. Y. The children are transported to and from the dispensary by the Red Cross Ambulance Corps. The children are brought to the dispensary on the afternoon of the day before the operation. They receive a physical examination and are entertained with motion pictures and music during the evening. In the morning the operations are performed and the children transferred to the hospital wing specially fitted up for their reception,

where they are kept until the following day. It is expected that fully 1,500 children will be operated on during the clinic, and subsequent health work among these children will be noted with interest as no other city, so far as reported, has attempted so comprehensive a service of this kind.

THE Eleventh Councilor District will hold its next meeting Oct. 21, 1920, at Delphi, and the following scientific program will be carried out: "Differential Diagnosis Within the Right Upper Abdominal Quadrant," Dr. Fred Terflinger, Logansport, with discussants, Drs. L. E. Jewett of Wabash and Wallace Grayston of Huntington; "The Irregular Practitioner and His Effect on the Future of Medicine, Dr. John F. Loomis of Marion, discussed by Drs. Nettie Powel of Marion and E. H. Griswald of Peru; "What Has Been Definitely Determined and Accomplished by Glandular Therapy?" by Dr. J. M. Hicks of Huntington, discussed by Drs. B. F. Wray of Camden and D. E. Miller of Twelve Mile; "The Surgical Treatment of Empyema by a Closed Method," illustrated and emphasized by showing two reels of motion pictures and a living example of the treatment, by Dr. Arvine E. Mazingo of Indianapolis. Dr. J. N. Hurty of Indianapolis will also address the meeting. A banquet and social entertainment given by the Carrol County Medical Society will follow the scientific program.

DURING September the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

United Synthetic Chemical Corporation: 20 per cent. Aromatized Suspension made from Benzyl Benzoate (Van Dyk and Co.).

The Heyden Chemical Works: Proganol.

Change of Agencies: Arheol and Rioline. The Council has directed that the description of Arheol (New and Nonofficial Remedies, 1920, p. 251) and Rioline (*Jour. A. M. A.*, Aug. 14, 1920, p. 477) be revised to state that these products are manufactured by P. Astier Laboratories, Paris and New York, and are distributed by George J. Wallau, Inc., New York.

Benzyl Alcohol (Van Dyk and Co.); Benzyl Benzoate (Van Dyk and Co.): The Council has directed that the description of Benzyl Alcohol-Van Dyk and Co. (New and Nonofficial Remedies, 1920, p. 28), and Benzyl Benzoate-Van Dyk and Co. (New and Nonofficial Remedies, 1920, p. 50), be revised to indicate that the United Synthetic Chemical Corporation is the distributor of these products.

Official articles not within the scope of New and Nonofficial Remedies: Capsules Folia-Digitalis (Upsher Smith), Tincture of Digitalis (Upsher Smith): These products are sold by Upsher Smith, St. Paul, Minn. The Council finds that they have the status of official articles and are, therefore, not within the scope of New and Nonofficial Remedies.

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County	Secretary	Date
1.	Decatur,	C. R. Bird.....	Feb. 1, 1920
2.	Fayette,	R. H. Elliott.....	Feb. 1, 1920
3.	Franklin,	E. M. Glaser.....	Feb. 1, 1920
4.	Fulton,	A. E. Stinson.....	Feb. 1, 1920
5.	Jasper-Newton,	O. E. Glick.....	Feb. 1, 1920
6.	Jefferson,	O. A. Turner.....	Feb. 1, 1920
7.	Marshall,	Harry Knott.....	Feb. 1, 1920
8.	Posey,	John Ranes.....	Feb. 1, 1920
9.	Shelby,	F. E. Bass.....	Feb. 1, 1920
10.	Sullivan,	J. B. Maple.....	Feb. 1, 1920
11.	Union,	J. D. Shonwald.....	Feb. 1, 1920
12.	Warrick,	J. F. Samples.....	Feb. 1, 1920
13.	Washington,	Claude B. Paynter.....	Feb. 1, 1920
14.	Wells,	G. B. Morris.....	Feb. 1, 1920
15.	Whitley,	H. M. Ego.....	Feb. 1, 1920
16.	Delaware-Blackford,	H. D. Fair.....	March 1, 1920
17.	Hancock,	C. H. Bruner.....	March 1, 1920
18.	Knox,	D. H. Richards.....	March 1, 1920
19.	Madison,	Doris Meister.....	March 1, 1920
20.	Monroe,	J. E. P. Holland.....	March 1, 1920
21.	Scott,	J. P. Wilson.....	March 1, 1920
22.	White,	H. B. Gable.....	March 1, 1920
23.	Marion,	Leslie H. Maxwell.....	April 1, 1920
24.	St. Joseph,	R. B. Dugdale.....	April 1, 1920
25.	LaGrange,	A. J. Hostetler.....	April 1, 1920
26.	Miami,	M. L. Wagner.....	April 1, 1920
27.	Steuben,	Mary Ritter.....	April 1, 1920
28.	Tiptecanoe,	W. M. Reser.....	April 1, 1920
29.	Wabash,	L. O. Sholty.....	April 1, 1920
30.	Fountain-Warren,	A. M. Sullivan.....	May 1, 1920
31.	Henry,	W. H. Stafford.....	May 1, 1920
32.	Jay,	C. A. Paddock.....	May 1, 1920
33.	Montgomery,	A. L. Loop.....	May 1, 1920
34.	Vanderburgh,	William E. Barnes.....	May 1, 1920
35.	Bartholomew,	H. H. Kamman.....	June 1, 1920
36.	Dearborn-Ohio,	E. J. Libbert.....	June 1, 1920
37.	Huntington,	F. B. Morgan.....	June 1, 1920
38.	Vigo,	W. D. Asbury.....	June 1, 1920
39.	Clarke,	.....	July 1, 1920
40.	Clinton	.....	July 1, 1920
41.	Kosciusko	.....	Sept. 1, 1920
42.	Lake County,	E. E. Evans.....	Oct. 1, 1920
43.	Noble County,	H. O. Williams.....	Oct. 1, 1920

INDIANA STATE MEDICAL ASSOCIATION

South Bend Session, September, 1920

House of Delegates—First Meeting

The first meeting of the House of Delegates was called to order at 7:45 p. m., Sept. 22, 1920, by the President, Charles H. McCully of Logansport.

Charles N. Combs, the Secretary, called the roll of delegates, and there being a quorum present the House was declared in session.

The President called for the reading of the minutes of the previous session, but on motion of Dr. A. L. Marshall, Indianapolis, duly seconded, the reading of the minutes was dispensed with.

It was moved, seconded and carried that the report of the Secretary-Treasurer as printed in *THE JOURNAL* be accepted and the reading dispensed with.

It was moved, seconded and carried that the report of the Executive Secretary as printed be accepted.

There was no report of the Committee on Credentials, the roll call being sufficient.

There was no report from the Committee on Scientific Work, that being covered by the program.

It was moved, seconded and carried that the report of the Committee on Medical Defense be adopted as printed. (Later, Dr. George T. McCoy, Columbus, notified the Secretary that there is one error in this printed report. Item No. 12, H. Karl Volland vs. Dr. Marshall, should be "Dismissed" instead of "Pending.")

It was moved, seconded and carried that the report of the Committee on Necrology be accepted as printed.

In connection with the report of the Committee on Scientific Exhibit, the Secretary announced that Dr. Ritchie of Indianapolis would have charge of the Scientific Exhibit at the Elks Club.

It was moved and seconded that the report of the Committee on Public Policy and Legislation be accepted as printed in *THE JOURNAL*. This report was discussed by Drs. W. F. Howat, Hammond; George F. Spohn, Elkhart; E. M. Shanklin, Hammond; S. B. Sims, Frankfort; C. H. Good, Huntington; A. L. Marshall, Indianapolis; C. H. McCaskey, Indianapolis; W. W. Wadsworth, Muncie; G. W. H. Kemper, Muncie; J. W. Baxter, New Albany, and E. E. Evans, Gary.

Dr. W. F. Howat moved to amend the motion by striking out that paragraph of the report concerning the annual registration and payment of a fee of \$2. Motion seconded, but lost. Vote on original motion carried.

It was moved, seconded and carried that the report of the Committee on Medical Education be accepted as printed in *THE JOURNAL*.

It was moved, seconded and carried that the report of the Committee on Industrial and Civic Relations be accepted as printed in *THE JOURNAL*.

In presenting the Report of the Committee on Hospital Standardization, Dr. Albert E. Sterne said he desired to call attention to some errors in the printed report. The number of hospitals investigated was eighty. Twenty-five hospitals expressed a desire to use interns; fifty-five expressed no such wish. A classification different from that of the American Medical Association was used—a standard B-plus, signifying that while the hospital was not actually in A rank, it was better than B. Since that time a number of hospitals have been classed A instead of B because of changes made.

There is also a matter of expense which must be figured, that of Dr. Lent, amounting to about \$25. The entire expense will be approximately \$200, without any per diem for the members.

Dr. Sterne further stated that the recommendation of last year was that a standing committee be elected by the House of Delegates for a term of years, according to the plan of the Committee on Medical Defense—that in turn the members drop out and new members be elected.

Dr. Sterne emphasized the importance of postgraduate teaching—a medical instruction course brought to the door of the doctor—although this would properly belong to the Council on Medical Education.

Moved by Dr. J. N. Kelly, Laporte, that the recommendations of last year, as amended by Dr. Sterne, be adopted. Motion seconded.

Moved by Dr. George T. Spohn, Elkhart, that the consideration of this report be deferred until Friday morning. Motion seconded and carried.

Dr. Stanley A. Clark, South Bend, then offered the following resolution regarding the death of William C. Gorgas, former Surgeon-General of the United States Army:

Resolved, That in the death of William C. Gorgas the medical profession has lost a great alienist, the United States its foremost sanitarian, and the world at large one of its beloved benefactors. Slow to accept new theories, once convinced, Gorgas never hesitated to pursue his convictions to their conclusion as proof of the correctness of those theories. Like the true soldier that he was, he never sought publicity for his own aggrandizement. Unlike the leaders of the great World War, his name was not on every tongue. These had vast armies for the destruction of human life, while his army was the silent unknown workers in the laboratory whose ceaseless work was aimed at the saving of human life by making vast fever-stricken areas free from disease. Where death followed in the wake of the war conquerors, his advance was the harbinger of health and peace and contentment.

The grandest monument that grateful humanity can build should be his. Though the Panama Canal stands as the marvelous feat of modern engineering and as a living example of the titanic energy of the American nation, yet without Gorgas and his faithful co-workers it would have failed of accomplishment. Truly of him it can be said in the words of the poet:

"So when a great man dies,
For years beyond our ken,
The light he leaves behind him lies
Upon the paths of men."

Resolved, That a copy of this resolution be sent to the widow of the deceased; to the office of the Surgeon-General of the U. S. A.; to *The Journal of the American Medical Association*; to the public press; and that the same be spread on the minutes of the Indiana State Medical Association.

It was moved by Dr. Clark that this resolution be adopted. Motion seconded and unanimously carried by rising vote.

The Secretary then read the following resolution received from the Treasury Department, Seventh Federal Reserve District:

Be It Resolved by This Body:

1. That the members be urged to practice wise spending and systematic saving.
2. That the members extend consideration in every way to thrift, giving expression thereof by saving as much as they may be able, and investing as much as they may be able in Treasury Savings Securities.
3. That unqualified endorsement be made by this body of the National Thrift Movement.

It was moved, seconded and carried that this resolution be adopted.

The Secretary then read the following resolution submitted by F. H. McMechan, Chairman of the Research Committee, National Anesthesia Research Society:

WHEREAS, The safety of patients, the advance of surgery and the demands of hospital service necessitate the rapid extension of the specialty of anesthesia, therefore be it

Resolved, That the Indiana State Medical Association hereby instructs its delegates to secure a Section on Anesthesia in the American Medical Association at the Boston meeting, June, 1921.

It was moved, seconded and carried that this resolution be adopted.

Dr. Charles H. Good, Warren: I move that we extend to Dr. G. W. H. Kemper our congratulations on his recovery, and God bless him on his trip to California.

Motion seconded and unanimously carried by rising vote.

The Secretary then read the recommendations of the Council in regard to changes in Councilor Districts: That Laporte County be transferred from District 10 to 13; that Benton County be transferred from District 10 to 9, and that White County be transferred from District 11 to 10.

Moved by Dr. E. M. Shanklin that these recommendations be adopted. Motion seconded and carried.

It was moved, seconded and carried that the report of the Committee on Revision of Constitution and By-Laws be adopted.

There being no further business, the House of Delegates adjourned to meet Friday morning at 11.

CHARLES N. COMBS, Secretary.

Second Meeting

Called to order by President C. H. McCully. Roll call by the secretary showed a quorum present.

First order of business was election of officers, which resulted in the following officers being selected for the year 1921:

President, Dr. David B. Ross, Indianapolis.

First Vice President, Dr. H. J. White, Hammond.

Second Vice President, Dr. I. M. Washburn, Rensselaer.

Third Vice President, Dr. O. R. Spigler, Terre Haute.

Secretary-Treasurer, Dr. Charles N. Combs, Terre Haute, reelected.

Delegate to the American Medical Association for the ensuing two years, Dr. J. Rilus Eastman, Indianapolis; alternate, Dr. M. R. Combs, Terre Haute.

Committee on Administration and Medical Defense, Dr. F. B. Wynn, Indianapolis, reelected for the ensuing three years.

Indianapolis was selected as the place of meeting, date to be Sept. 28, 29 and 30, 1921.

Unfinished business: Dr. Sterne's report as chairman of the Committee on Hospital Standardization was open for discussion. Report was finally adopted except that part which referred to postgraduate courses was referred to the Committee on Medical Education for action. The first four recommendations of last year's report were adopted in connection with this year's report, namely:

1. The creation of a standing Committee on Hospitals, composed of not less than five (5) members serving for a term of five (5) years, to be elected by the House of Delegates.

2. It shall be the duty of this Committee to obey the mandates of the Council on Medical Education of the American Medical Association, and make annual report to this House of Delegates.

3. The expense incident to the conduct of the necessary affairs of this Committee shall be authorized by Committee on Administration; the latter shall fix and allow a reasonable per diem recompense to members of the Hospital Committee while away from practice

engaged on tours of inspection, as well as railway fares, hotel expenses, etc.; a certified copy of expenditures must accompany any claim on the treasury of the Association.

4. The Committee on Hospitals shall be empowered to formulate its own methods of procedure, call all required assistance to complete and perpetuate its task, and otherwise conform to the standards adopted by the Council on Medical Education of the American Medical Association.

In accordance with recommendation No. 1, the House proceeded to elect the following members of the Committee on Hospital Standardization: Dr. A. E. Sterne, Indianapolis, for five years; Dr. George D. Miller, Logansport, four years; Dr. J. H. Weinstein, Terre Haute, three years; Dr. E. J. Lent, South Bend, two years; Dr. W. H. Stemm, North Vernon, one year.

Dr. Jett introduced the following resolution, which was adopted:

Resolved, That the Indiana State Medical Association recommend to the trustees of the Indiana University the establishment of a department of physical therapy in the Indiana University School of Medicine.

Dr. A. M. Sullivan of Attica moved the establishment of an all time executive secretary's office. After discussion, motion and second withdrawn.

Dr. Sullivan then moved that a special fund be raised among the members for the purpose of carrying out the work of the Committee on Public Policy and Legislation. After discussion and vote, the motion was indefinitely postponed.

Dr. David Ross, Indianapolis, the incoming president, was introduced, and he briefly spoke to the meeting.

Moved and carried with enthusiasm, the House of Delegates extend to South Bend and the St. Joseph County Medical Society a vote of thanks for the hospitality during this session.

Adjourned.

CHARLES N. COMBS, Secretary.

The Council—First Meeting

A quorum being present, the Council was called to order by the chairman, Dr. G. W. H. Kemper, at 4 p. m., Wednesday, September 22, at the Hotel Oliver, South Bend.

Present, Drs. McCully, Kemper, Moffitt, Morgan, Welborn, Leach, Miller, Shanklin and Combs.

The work of the Medical Defense Committee was discussed and the fact was brought out that the county societies and the officers of the Association are not cooperating by living up to the specific provisions of the by-laws in conducting this department. Dr. Shanklin moved that the secretary revise and reprint the blanks to be filled out by the county society and by the member involved, and that the secretary notify the attorney of the Indiana State Medical Association that he must have these blanks properly prepared and must be authorized by the approval of the county society and by the Medical Defense Committee before entering into active defense of any member; also that a notice be prepared for THE JOURNAL, calling to the attention of the members the exact method of procedure to be followed in applying for medical defense.

A letter from the American Medical Association was read, offering the services of an organizer in securing new members. A motion carried that it was not deemed advisable at the present time for the Association to accept this offer.

Dr. G. W. H. Kemper presented the following letter:

To the Councilors of the Indiana State Medical Association:

I desire, owing to my ill health and to the fact that I expect to be absent from the state for several months, to tender my resignation as Councilor of the Eighth Councilor District, the same to take effect as soon as my successor is elected.

In taking my leave of this body, I desire to express my sincere thanks for the uniform kindness shown to me during all these years that I have served in this capacity.

I may say with some little pride that my service began with the first meeting of the Councilors and I am the only member who has served from the beginning to the present time.

Very sincerely yours,

G. W. H. KEMPER, M.D.

Sept. 22, 1920.

On explanation that a meeting of the District Society in his district would be held October 21, it was voted to postpone the acceptance of this resignation until after his successor had been elected.

Adjournment.

CHARLES N. COMBS, Secretary.

Second Meeting

Chairman Dr. Kemper being absent, Dr. Shanklin was elected temporary chairman. The meeting was called to order at 12:30, Friday, September 24.

Present, Drs. Ross, Shanklin, Morgan, Moffitt, Welborn, Eckhart, Bulson and Combs.

Dr. Bulson, editor of THE JOURNAL, made a report showing the greatly increased cost in printing THE JOURNAL, and the possibility of a deficit at the end of the year, and a motion was adopted authorizing the treasurer to pay him \$1.50 per member for each JOURNAL subscription, beginning Jan. 1, 1921.

In view of the change of the medical defense funds from the defense committee to the treasurer, the treasurer was notified to keep this fund in the amount not exceeding \$6,000.

The valued and highly appreciated work of Dr. W. N. Wishard, as chairman of the Committee on Public Policy and Legislation, was reviewed, and the secretary was authorized to notify Dr. Wishard that funds would be placed at his disposal in order that he could carry out the methods of organization which he has in mind, and which will be of undoubted benefit to the Association.

Adjourned.

CHARLES N. COMBS, Secretary.

Minutes of General Meeting

South Bend Session, September, 1920

The first general meeting of the Indiana State Medical Association was called to order at 9:15 a. m., Sept. 23, 1920, in the Rotary Room of the Oliver Hotel, South Bend, by the President, Dr. Charles H. McCully, Logansport.

The invocation was pronounced by Father John De Grote, of St. Patrick's Church, South Bend.

The mayor of South Bend, Mr. F. R. Carson, welcomed the Association. This was responded to by President McCully.

Dr. Virgil Moon, Indianapolis, read a paper entitled "Tuberculosis of the Kidney: Pathology."

Dr. F. B. Wynn, Indianapolis, read a paper entitled "Tuberculosis of the Kidney: Early Recognition and Management from the Viewpoint of the Internist."

Dr. H. O. Mertz, Indianapolis, read a paper entitled "Tuberculosis of the Kidney: Differential Diagnosis."

Dr. R. C. Beeler, Indianapolis, read a paper entitled "Tuberculosis of the Kidney: Value of the Roentgen Ray in Diagnosis."

Dr. H. G. Hamer, Indianapolis, read a paper entitled "Tuberculosis of the Kidney: Surgical Treatment."

The above symposium was discussed by Drs. Charles Beall, Fort Wayne; Charles Terry, South Bend; H. K. Bonn, Indianapolis; A. C. Kimberlin, Indianapolis; P. E. McCown, Indianapolis; Bernhard Erdman, Indianapolis; and in closing by Drs. R. C. Beeler and H. G. Hamer.

The General Meeting adjourned until Friday afternoon at 2 o'clock.

Second Meeting

The second General Meeting of the Indiana State Medical Association was called to order at 2 p. m., Sept. 24, 1920, by Dr. Charles Stoltz, South Bend, acting chairman.

Dr. A. M. Sullivan, Attica, read a paper on "Public Policy and Legislation." This paper was discussed by Drs. E. M. Shanklin, Hammond; W. C. Gott, Crawfordsville; A. M. Hayden, Evansville; Harry Elliott, Brazil; E. E. Evans, Hammond; Charles Stoltz, South Bend, and the discussion closed by Dr. A. M. Sullivan.

Dr. M. F. Boulden, Frankfort, read a paper entitled "The Acute Abdomen." This paper was discussed by Dr. J. C. Fleming, Elkhart.

Dr. Will C. Moore, Muncie, read a paper entitled "Injuries of Peripheral Nerves." There was no discussion of this paper.

Dr. W. D. Asbury, Terre Haute, read a paper entitled "Mediastinal Tumor, with Report of Case." There was no discussion of this paper.

Dr. Charles A. McCully, retiring President, then thanked the members for their cooperation during the past year, particularly those who had served on the various committees.

The Secretary, Dr. C. N. Combs, announced that Dr. David Ross had been elected President of the Association for the ensuing year, and that the place of meeting for 1921 is Indianapolis.

This finished the program, and the General Meeting adjourned.

Minutes of Section on Medicine

South Bend Session, September, 1920

The first session of the Medical Section of the Indiana State Medical Association was called to order in the Auditorium of the Elks' Club, South Bend, at 2:15 p. m., Thursday, Sept. 23, 1920, by the chairman, Dr. Charles P. Emerson, Indianapolis.

Dr. J. E. P. Holland, Bloomington, read a paper entitled "Student Health in Indiana University."

Dr. C. E. Reed, Culver, presented a paper on "Benefits of Compulsory Military Training."

Dr. J. O. Ritchie, Indianapolis, read a paper on "Blood Chemistry as Applied to Clinical Medicine, with Demonstration of Methods and Results."

Dr. O. B. Nesbit, Gary, spoke on the subject of "Malnutrition in the Schools."

Capt. C. P. Knight, of the United States Public Health Service, Jefferson City, Mo., delivered an address on the U. S. P. H. S. Survey regarding malnutrition in children that is now in progress in Missouri.

These papers were discussed by Drs. Hugh Miller, South Bend; Milo Miller, South Bend; Walter D.

Hoskins, Indianapolis; William F. Howat, Hammond; John Hurty, Indianapolis; C. E. Reed, Culver; J. O. Ritchie, Indianapolis, and O. B. Nesbit, Gary.

Dr. Chester Marsh, Newcastle, presented a paper entitled "Significance of Epilepsy, and a Consideration of Some of Its Problems of Diagnosis and Treatment."

Dr. W. D. Van Nuys, Newcastle, read a paper entitled "Duty of the State in Regard to the Epileptic."

These papers were discussed by Drs. Albert E. Sterne, Indianapolis; John Hurty, Indianapolis; Walter D. Hoskins, Indianapolis; Chester Marsh and W. D. Van Nuys, Newcastle.

Adjournment at 5:40 p. m. to reconvene at 9 a. m., Friday.

Second Session—Friday, September 24

The second session of the Medical Section was called to order at 9:10 a. m., Friday, September 24, by the Chairman, Dr. Charles P. Emerson, Indianapolis.

Dr. H. D. Fair, Muncie, read a paper entitled "'Soft Parts' as a Factor in Obstetrics."

Dr. William Moore, New Albany, presented a paper on "Puerperal Eclampsia."

These papers were discussed by Drs. F. R. Clapp, South Bend; A. M. Mendenhall, Indianapolis; Jane Ketcham, Indianapolis; H. D. Fair, Muncie, and William Moore, New Albany.

Dr. C. S. Bosenbury, South Bend, read a paper on "Protein Sensitization."

Discussed by Drs. Charles Sellars, Hartford City; Virgil Moon, Indianapolis.

Dr. L. D. Reed, Hope, presented a paper entitled "Arthritis Deformans." No discussion.

Dr. Grace Line Homman, Laporte, read a paper by Dr. J. N. McCoy, Vincennes, entitled "Systemic Reaction of Roentgen Ray Treatment of Arteriosclerosis."

Discussed by Dr. Charles Grandy, Fort Wayne, and Dr. Grace Line Homman, Laporte.

Dr. George G. Richardson, Van Buren, moved that owing to the lateness of the hour and the extreme heat his paper, entitled "Cholecystitis" be read by title only and published in THE JOURNAL with Dr. B. P. Weaver's discussion, which was submitted in writing. Motion seconded, carried, and so ruled by the Chair.

Election of Officers: The election of Section officers for the ensuing year resulted as follows:

Chairman, Dr. F. R. Clapp, South Bend.

Vice Chairman, Dr. G. G. Richardson, Van Buren.

Secretary, Dr. C. S. Black, Warren.

Adjournment at 12:30 p. m., *sine die*.

Minutes of Surgical Section

The first meeting of the Surgical Section was called to order at 2:05 p. m., Sept. 23, 1920, in the Rotary Room of the Hotel Oliver, South Bend, by the Chairman, Dr. James Y. Welborn, Evansville.

Dr. Ivan C. Brenner, Winchester, read a paper entitled "A Consideration of the Association of Free Hydrochloric Acid and Gastric Motility in Gastric Diseases." This paper was discussed by Drs. Frank H. Jett, Terre Haute; H. O. Pantzer, Indianapolis; W. H. Foreman, Indianapolis, and Alfred S. Jaeger, Indianapolis.

Dr. Frank Crockett, Lafayette, read a paper entitled "Treatment of the Prostate." This paper was discussed by Drs. Frank H. Jett, Terre Haute; J. C. Fleming, Elkhart; P. E. McCown, Indianapolis; J.

Rilus Eastman, Indianapolis; Charles Stoltz, South Bend; Bernhard Erdman, Indianapolis; A. M. Hayden, Evansville; H. G. Hamer, Indianapolis, and the discussion closed by Dr. Frank Crockett.

Dr. B. R. Kirklin, Muncie, read a paper entitled "The Role of the Roentgen Ray in Diagnosis of the Surgical Abdomen with Special Emphasis on Its Use in the Gallbladder and Appendiceal Regions." This paper was discussed by Drs. William Davidson, Evansville; Charles W. Haywood, Elkhart; H. O. Pantzer, Indianapolis; Alfred S. Jaeger, Indianapolis, and by Dr. B. R. Kirklin in closing.

Dr. Carl Habich, Indianapolis, read a paper entitled "The Course of Chronic Ascending Pelvic Infections." This paper was discussed by Drs. Walter J. Baker, South Bend; E. E. Padgett, Indianapolis; James A. Work, Elkhart; Alfred S. Jaeger, Indianapolis; J. C. Fleming, Elkhart, and the discussion closed by Dr. Carl Habich.

Dr. Frank G. Jackson, Muncie, read a paper entitled "Infections of the Hand." This paper was discussed by Dr. John N. Sluss, Indianapolis, and the discussion closed by Dr. Frank G. Jackson.

The Section adjourned until 9 o'clock Friday morning.

Second Meeting

The second meeting of the Section on Surgery was called to order at 9:20 a. m., Sept. 24, 1920, by the Chairman, Dr. J. Y. Welborn.

Dr. Luther Williams, Indianapolis, read a paper entitled "Surgery of the Gallbladder." This paper was discussed by Drs. William Davidson, Evansville; G. W. H. Kemper, Muncie; James Y. Welborn, Evansville; A. M. Hayden, Evansville; E. E. Padgett, Indianapolis; W. D. Gatch, Indianapolis; Alfred S. Jaeger, Indianapolis; J. C. Fleming, Elkhart; W. H. Williams, Lebanon; H. A. Duemling, Fort Wayne, and the discussion closed by Dr. Luther Williams.

Dr. Joseph Rilus Eastman, Indianapolis, read a paper entitled "Silver Wire in Vesicovaginal Fistula." This paper was discussed by Drs. E. E. Padgett, Indianapolis; Frank Jett, Terre Haute; Luther Williams, Indianapolis; J. C. Fleming, Elkhart, and in closing by Dr. Joseph Rilus Eastman.

The election of officers for the Section on Surgery then followed, resulting as follows:

Chairman, Charles Terry, South Bend.

Vice Chairman, H. K. Bonn, Indianapolis.

Secretary, E. E. Padgett, Indianapolis.

Dr. H. H. Martin, Laporte, read a paper entitled "Rupture of the Intestines." This paper was discussed by Drs. H. A. Duemling, Fort Wayne; J. B. Berteling, South Bend; David Ross, Indianapolis; J. C. Fleming, Elkhart; George D. Marshall, Kokomo; W. D. Gatch, Indianapolis, and the discussion closed by Dr. H. H. Martin.

The paper of Dr. Miles Porter, Fort Wayne, on "Cancer of the Breast: The Present Status of the Subject, with Especial Reference to Treatment," was read by Dr. Miles F. Porter, Jr. This paper was discussed by Drs. W. D. Gatch, Indianapolis; Thomas C. Kennedy, Indianapolis, and H. A. Duemling, Fort Wayne.

Dr. George D. Marshall, Kokomo, read a paper entitled "Diagnosis and Treatment of Diseases and Injuries of the Spine." This paper was discussed by Drs. J. C. Fleming, Elkhart; Grace Line Homman, Laporte, and by Dr. George D. Marshall, in closing.

Section adjourned.

Minutes of Eye, Ear, Nose and Throat Section*South Bend Session, September, 1920*

The first meeting was called to order at 2 p. m., Thursday, Sept. 27, 1920, by Dr. W. A. Hollis, Hartford City, acting chairman.

Dr. G. H. Mundt, Chicago, read a paper on "Indications for Mastoid Operation." Discussed by Drs. W. S. Tomlin, Indianapolis; George W. Spohn, Elkhart; M. H. Krebs, Huntington; Albert E. Bulson, Jr., Fort Wayne; H. W. Boyd-Snee, South Bend; D. O. Kearby, Indianapolis; G. H. Mundt, Chicago.

Dr. C. H. McCaskey, Indianapolis, read a paper on "Syphilis as a Factor in Deafness." Discussed by Drs. George W. Spohn, Elkhart; C. G. Adams, Kokomo; W. S. Tomlin, Indianapolis; Albert E. Bulson, Jr., Fort Wayne; H. W. Boyd-Snee, South Bend; G. H. Mundt, Chicago; C. H. McCaskey, Indianapolis.

Dr. Albert E. Bulson, Jr., Fort Wayne, read a paper on "Simple Glaucoma: Its Early Recognition and Treatment." Discussed by Drs. B. J. Larkin, Indianapolis; George W. Spohn, Elkhart; Albert E. Bulson, Jr., Fort Wayne.

The following officers were elected for the ensuing year:

Chairman, Dr. W. A. Hollis, Hartford City.

Vice Chairman, Dr. C. H. McCaskey, Indianapolis.

Secretary, Dr. E. M. Shanklin, Hammond.

Friday, September 24—Morning

Dr. Charles J. Adams, Kokomo, read a paper on "The Selection and Application of Rational Procedures for Penetrating Eye Injuries." Discussed by Drs. W. A. Hollis, Hartford City; Albert E. Bulson, Jr., Fort Wayne; G. H. Mundt, Chicago; M. H. Krebs, Huntington; C. N. Howard, Warsaw; Charles J. Adams, Kokomo.

Dr. Karl T. Brown, Muncie, read a paper on "Submucous Resection of Nasal Septum." Discussed by Drs. W. S. Tomlin, Indianapolis; D. O. Kearby, Indianapolis; Charles J. Adams, Kokomo; W. A. Hollis, Hartford City; M. H. Krebs, Huntington; Karl T. Brown, Muncie.

Adjournment.

THE TRUTH ABOUT MEDICINES**NEW AND NONOFFICIAL REMEDIES**

Since publication of New and Nonofficial Remedies, 1920, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

SODIUM ARSPHENAMINE.—Sodium Arsenphenolamine.—The sodium salt of 3-diamino-4-dihydroxy-1-arsenobenzene with a stabilizing medium. The arsenic content of three parts of sodium arspenamine is equivalent to two parts of arspenamine. Sodium arspenamine has the same actions and uses as those of arspenamine; its advantage over arspenamine is that it does not require addition of alkali before use. To prepare the solution the sodium arspenamine is added to the required amount of sterile water and dissolved by gentle agitation.

SODIUM DIARSENOL.—A brand of sodium arspenamine. Sodium diarsenol is marketed in ampules containing 0.15 Gm., 0.3 Gm., 0.45 Gm., 0.6 Gm., 0.75 Gm.,

and 0.9 Gm., respectively. Diarsenol Laboratories, Inc., Buffalo, N. Y.

CORPUS LUTEUM TABLETS—ARMOUR 5 GRAIN.—Each tablet contains 5 grains of desiccated corpus luteum—Armour (see New and Nonofficial Remedies, 1920, p. 203) (*Jour. A. M. A.*, Sept. 18, 1920, p. 815).

PROPAGANDA FOR REFORM

MORE MISBRANDED NOSTRUMS AND DRUG PRODUCTS.—The following products have been the subject of prosecution under the federal Food and Drugs Act: Beecham's Pills were held misbranded because the curative claims made for them were false and fraudulent, and because the pills were not made in England as claimed. Pike's Liver, Kidney and Stomach Remedy, because the therapeutic claims were false and fraudulent. Ergot Apio Compound (Evans Drug Co.), because the capsules did not contain the claimed amounts of drugs and because they were an imitation. Prescription 1000, sold in two forms, a copaiba preparation for internal use and a dilute potassium permanganate solution for external use, was sold under false and fraudulent therapeutic claims. Rival Herb Tablets were tablets falsely claimed to be chocolate coated and sold under false and fraudulent therapeutic claims. Wilson's Solution Anti-Flu consisted essentially of oil of eucalyptus, methyl salicylate and thymol or oil of thyme, and was falsely claimed to be effective as a remedy for influenza, colds and grippe. Castor Oil Capsules (Evans Drug Co.), did not contain the amount of drug claimed (*Jour. A. M. A.*, Sept. 4, 1920, p. 690).

PREVENTION OF GOITER.—The latest report on the prevention of goiter by administration of sodium iodid by Marine and Kimball—an investigation carried out under a grant from the Therapeutic Research Committee of the Council on Pharmacy and Chemistry—indicates a striking difference between those girls not taking and those taking iodine. The difference is manifested both in the prevention of enlargement and in a decrease in the size of existing enlargements. Of 2,190 pupils taking 2 gm. of sodium iodid twice yearly, five have shown enlargement of the thyroid, while of 2,305 pupils not taking the prophylactic, 495 have shown enlargement of the thyroid. Of 1,182 pupils with thyroid enlargement at the first examination who took the prophylactic, 773 thyroids decreased in size, while of 1,048 pupils with thyroid enlargement at the first examination who did not take the prophylactic, 145 thyroids decreased in size (*Jour. A. M. A.*, Sept. 4, 1920, p. 674).

USING UNFIT ETHER.—In the case of Moehlenbrock versus Park, Davis and Company et al., the Supreme Court of Minnesota denied the surgeons who had administered the ether a new trial, after a verdict had been entered against both the manufacturer and the surgeons. The Supreme Court holds that for the death which resulted from the use of the unfit ether both the manufacturer and the surgeons were responsible. The surgeons were held to be negligent in administering to a patient ether that was unfit for use and in their care after the ether was administered (*Jour. A. M. A.*, Sept. 11, 1920, p. 763).

LYKO.—This is an alcoholic tonic which has been widely advertised in the newspapers. It is put out by the Lyko Medicine Co., Kansas City, Mo. Lyko is claimed to stimulate the appetite, tone up the digestive organs and to have laxative qualities. It is said to contain caffeine, kola, phenolphthalein and cascara sagrada. The advertising does not discuss the most powerful ingredient, alcohol, although the label declares the presence of 23 per cent. of this drug. As a result of an exhaustive examination, the A. M. A. Laboratory concludes that Lyko is essentially a sweetened solution containing about 22.2 per cent. of alcohol together with insignificant amounts of caffeine,

cascara extractives and phenolphthalein. There was no evidence to show that the product is sufficiently medicated to prevent its being used as a beverage (*Jour. A. M. A.*, Sept. 11, 1920, p. 757).

NATURE'S CREATION.—This is one of the fake consumption cures. It was originally put on the market as an absolute cure for syphilis. When analyzed in the A. M. A. Laboratory it was found to be essentially a solution of potassium iodid in a weakly alcoholic medium containing vegetable extractives and flavoring matter, and small quantities of inorganic salts (*Jour. A. M. A.*, Sept. 11, 1920, p. 758).

IODEX, A MISBRANDED IODIN OINTMENT.—(1) Claim: 5 per cent. iodine. Finding: iodine content only about 3 per cent. (2) Claim: free iodine. Finding: no free iodine. (3) Claim: absorbed through the skin, iodine can be found in urine 30 minutes after inunction. Finding: the assertion that iodine can be found in the urine after Iodex has been rubbed on the skin has been experimentally disproved. The preceding is taken from a poster of the A. M. A. Chemical Laboratory at the A. M. A. New Orleans meeting (*Jour. A. M. A.*, Sept. 18, 1920, p. 830).

DIABETIC FOODS.—A report from the Connecticut Agricultural Experiment Station on diabetic foods includes not only the content of carbohydrate in these products but also that of protein and fat in view of the recognized necessity of taking into account all of the nutrients in any proper formulation of regimen for the diabetic patient. There is no satisfactory definition of what a diabetic food is, nor is there any universal diabetic food. The value of accurate information regarding the makeup of such products as may find special application in the dietotherapy, such as given in the Connecticut report, lies in the fact that it enables clinicians and the patient to proceed intelligently in the direction of diet planning with a view to tolerance of all the nutrients. Of particular interest in the report are the analyses of bran, which is being widely used at present to give bulk to the food residues in the alimentary canal. It appears that common, unwashed bran frequently contains no more than half as much starch as some of the advertised brands of "health" bran (*Jour. A. M. A.*, Sept. 18, 1920, p. 818).

CALCIDIN TABLETS—ABBOTT.—Calcidin is claimed to be a mixture of iodine, lime and starch. In contact with water, the iodine and lime react to form calcium iodid and calcium iodate. By the acid of the gastric juice, the calcium iodid and calcium iodate are decomposed with liberation of free iodine. The administration of calcidin tablets amounts to giving free (elementary) iodine. The effects produced by the administration of free iodine appear not to differ from those produced by the administration of iodids, and, therefore, calcidin has no advantage over the iodids, such as sodium iodid (*Jour. A. M. A.*, Sept. 25, 1920, p. 892).

SOME MISBRANDED VENEREAL NOSTRUMS.—The following preparations have been the subject of prosecution by the federal authorities under the Food and Drugs Act on the ground that the therapeutic claims which were made for them were false and fraudulent: Injection Cadet (E. Fougere and Co., New York), a dilute watery solution of copper sulphate and unidentified plant material. Knoxit Injection (Beggs Manufacturing Co., Chicago), a solution of zinc acetate with alkaloids of hydrastis, in glycerin and water. Knoxit Liquid, a solution of zinc acetate with alkaloids of hydrastis, in glycerin and water. Knoxit Globules, essentially a mixture of volatile and fixed oils and oleoresins, including copaiba balsam, cinnamon and cassia. Grimault's Injection (E. Fougere and Co., New York), a weak watery solution of copper sulphate and plant extractives, probably matico. Halz Injection (Edw. Price Chemical Co., Kansas City, Mo.), consisting essentially of zinc sulphate, boric

acid, glycerin, traces of alum and formaldehyd and water. Tablets which seem to go with the product consisted essentially of calcium and magnesium carbonates, copaiba, a laxative plant drug, plant extractives, a small amount of an unidentified alkaloid, sugar and starch. Noxit (Frederick F. Ingram Co., Detroit), consisting essentially of opium, berberine, a zinc salt, glycerin, alcohol and water. Crossmann Mixture (Wright's Indian Vegetable Pill Co., New York City), essentially an alcoholic solution of volatile oils, including balsam copaiba and cubebs. Santal-Pearls (S. Pfeiffer Mfg. Co., St. Louis), consisting essentially of a cinnamon-flavored mixture of santal oil and copaiba. Cu-Co-Ba-Tarrant (Tarrant Co., New York City), consisting essentially of a mixture of extract of cubebs and copaiba with magnesium oxid. Hygienic and Preservative Brou's Injection (E. Fougere and Co.), consisting essentially of acetates and sulphates of zinc and lead, morphin, water and a very small amount of alcohol (*Jour. A. M. A.*, Sept. 25, 1920, p. 891).

BOOK REVIEWS

SYMPTOMS IN THE DIAGNOSIS OF DISEASE. By Hobart Amory Hare, M.D., B.Sc. Eighth edition, thoroughly revised and illustrated with 195 engravings and 9 plates. 560 pages. Philadelphia and New York: Lea and Febiger, 1920. Cloth, \$6.

Too much cannot be said in praise of this excellent work, and for the reason that the younger men in the practice of medicine show a decided tendency to get away from the old time-tried and valuable methods of studying and correlating symptoms as an aid in diagnosis. Altogether too many of our younger physicians are inclined to study the temperature charts and the laboratory reports, and to give scant attention to symptoms and a careful study of the patient himself. As is well stated by the author, the well-trained physician carefully notes the symptoms, gives to each its proper value, and, if need be, makes his laboratory investigations afterward. If the laboratory technic is beyond his skill, as it often must be, he calls to his aid someone qualified to provide the knowledge he seeks, and if he fails to do this when it is essential he is not a careful practitioner. The author has omitted laboratory methods from the text, as it has been his intent to lay special emphasis on symptomatology and, therefore, this volume is essentially devoted to a plan whereby a recognition of symptoms will lead the physician to a diagnosis. To accomplish this the symptoms used in diagnosis are discussed first, and their application to determine the character of disease follows. In other words, the book is written on the plan which is actually followed in practice, namely, the up-building of a diagnosis by the grouping of symptoms.

It is impossible to enumerate the many subjects discussed. It is only necessary to say that the book covers all of those symptoms observed and described by the patient, as well as those determined by careful examination, which are of vital importance in the forming of a diagnosis and treatment. The objective symptoms seen by the physician, the subjective symptoms described by the patient, and the physical signs listed by auscultation, percussion, palpation, and mensuration are bound together in forming a diagnostic view of the case. The art of observing, questioning, and examining the patient is considered in an interesting way.

Diphtheria Antitoxin Then *and* Now

When the **Mulford Laboratories** made the first antitoxin that was produced commercially in this country, in 1894, the doses were necessarily very large and bulky, and one ounce glass stoppered vials were used as containers.



Early form of
Antitoxin
Container

NOW, as a result of research and long experience, we are able to produce refined and concentrated antitoxin, testing as high as 3000 units and more per Cc. Furthermore, rigid check tests for potency and sterility guarantee the strength and purity of the product.

The **Mulford Laboratories** were the first to introduce a piston syringe container for antitoxin, and the present perfected syringe gives you a most convenient sterile container, ready for immediate use.

Mulford Diphtheria Antitoxin

Purified and concentrated
High potency
Low total solids
Same density as the blood
Dosage and sterility
guaranteed

The Mulford label is your guarantee of absolute reliability on Diphtheria Antitoxin and all other Biological Products.



Mulford Perfected Antitoxin Syringe

Ask for new booklet on Diphtheria Products.



H. K. MULFORD COMPANY, Philadelphia, U. S. A.

Removal Notice.—The executive, general and sales offices are now located in the Mulford Building, 640 North Broad Street.

16830

Mulford

THE PIONEER BIOLOGICAL LABORATORIES

Adrenalin in Medicine

2—Treatment of the Paroxysm of Asthma

THE fact that Adrenalin promptly relieves the paroxysm of bronchial asthma has been demonstrated in thousands of cases. Explanation of its mode of action, however, must be couched in the language of probability and speculation, because the pathogenesis of the disease is the subject of an ever-increasing number of theories and much controversy.

Among the more reasonable and credible of these theories are: 1, Anaphylactic manifestations in the bronchial mucosa from bacterial protein sensitization; 2, The same condition produced by sensitization to food proteins (allergy), pollens of plants and animal emanations; 3, Reflex vagus irritation of the bronchial mucosa from peripheral afferent impulses originating along the course of distribution of this nerve.

It is not unlikely that every case of bronchial asthma can be explained by one of these theories, and that, indeed, in some of the cases more than one of these factors are underlying. Regardless of the theory or theories applicable to any given case, the immediate mechanical cause of the distressing paroxysm is a sudden spasmodic stenosis of the bronchioles.

The action of Adrenalin

is to relieve this stenosis. Whether the dilator muscles of the straightened tubules are stimulated or the circular constrictor muscles are temporarily paralyzed by Adrenalin to bring about this change in the calibre of the bronchioles cannot be definitely stated. It is interesting to note in connection with the protein sensitization theory that anaphylactic phenomena elsewhere in the body are often favorably influenced by Adrenalin—especially in respect to the skin manifestation, urticaria.

Adrenalin is the best emergency remedy for the treatment of the asthmatic paroxysm at the command of the physician. Two to ten minims of Adrenalin (1:1000) are given subcutaneously, or preferably intramuscularly. Frequently only five or ten seconds elapse after the injection when partial alleviation of the dyspnoea is noticed. In a few minutes relief is complete. Adrenalin acts quickly or not at all. In those few cases in which no favorable effect becomes apparent after the first injection this medication should not be pushed. Some practitioners have noted that the injection of Pituitrin in combination with Adrenalin (equal parts) enhances and prolongs the action of the latter.



PARKE, DAVIS & COMPANY

LIBRARY
1920

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 11

FORT WAYNE, IND.. NOVEMBER 15, 1920

PER YEAR, \$2.50
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES	PAGE	MISCELLANEOUS	PAGE
The Physician. The General Practitioner. Frank B. Wynn, M.D., Indianapolis.....	365	Deaths	381
Legacies of Asset and Liability. Charles H. McCully, Logansport, Ind.	371	News Notes and Personals.....	382
Probable Strychnia Poisoning from Hinkle Tablets. Case Report. A. M. Winklepleck, M.D., Elmhurst, Ind.....	375	Correspondence	386
Local Indications for Tonsillectomy and Adenoidectomy. John W. Carmack, M.D., Indianapolis.....	376	The Truth About Medicines.....	389
		Book Reviews	391
EDITORIALS		SOCIETY PROCEEDINGS	
The Management of Squint in Young Children.....	378	Hendricks County	387
Election Results from the Medical Standpoint.....	379	Tippecanoe County	387
The Small Salaries of Contract Workers.....	379		
Editorial Notes	380		

NEXT ANNUAL SESSION, INDIANAPOLIS, SEPTEMBER 28, 29, 30, 1921. LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.
ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS
OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103,
ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

Volume I Now Ready

Surgical Diagnosis and Treatment

BY EMINENT SURGICAL AUTHORITIES

EDITED BY

ALBERT J. OCHSNER, M.D., F.A.C.S.

Professor of Surgery in the University of Illinois; Surgeon-in-Chief to the Augustana and St. Mary's Hospitals, Chicago, Ill.

*Four octavo volumes of about 850 pages each, with over 2,000 illustrations, many in colors.
Cloth, per set, \$40.00, net*

"THE GREATEST SURGERY OF ALL TIME" is what we believe you will call this work, for seventy-six of America's greatest surgeons have written it.

It in every sense reflects the current practice and thought of the most intensely active surgeons of this continent. Its chapters tell the why and how in the solution of each surgical problem, what to do and what to avoid. It brings you in touch with the actual experience, reasoning and practical methods of men eminent in all parts of the country. Each one describes intimately his methods of diagnosis, his plans for treatment before and after operation and gives his judgment regarding them. This monumental work gives you the opinions not of one man, but the combined experience, skill and advice of seventy-six of our foremost surgeons.

Each man writes on the field in which he
has achieved greatest success and fame

Send for literature descriptive of this work

PHILADELPHIA

LEA & FEBIGER

NEW YORK

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, Indianapolis, September 28, 29 and 30, 1921

OFFICERS AND COMMITTEES FOR 1921

President.....DAVID ROSS, Indianapolis
 1st Vice President.....HUGH J. WHITE, Hammond
 2d Vice President.....IRA M. WASHBURN, Rensselaer
 3d Vice President.....OTTO R. SPIGLER, Terre Haute
 Secretary-Treasurer.....CHAS. N. COMBS, Terre Haute

SECTION OFFICERS

Surgical Section—Chairman, Charles C. Terry, South Bend; Vice Chairman, H. K. Bonn, Indianapolis; Secretary, E. E. Padgett, Indianapolis.

Medical Section—Chairman, Fred R. Clapp, South Bend; Vice Chairman, George G. Richardson, Van Buren; Secretary, Claude S. Black, Warren.

Eye, Ear, Nose and Throat Section—Chairman, William A. Hollis, Hartford City; Vice Chairman, Carl H. McCaskey, Indianapolis; Secretary, Eldridge M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1921), Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington. For two years (term expires December 31, 1922), Dr. Joseph Rilus Eastman, Indianapolis. Alternate, M. R. Combs, Terre Haute.

COUNCILORS

Chairman, G. W. H. Kemper, Muncie.

DISTRICT	TERM EXPIRES	DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920	7th—S. E. Earp, Indianapolis.....	December 31, 1923
2d—J. B. Maple, Sullivan.....	December 31, 1921	8th—G. W. H. Kemper, Muncie.....	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922	9th—William R. Moffit, Lafayette.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920	10th—E. M. Shanklin, Hammond.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921	11th—G. G. Eckhart, Marion.....	December 31, 1921
6th—Frank J. Spilman, Connersville.....	December 31, 1922	12th—E. E. Morgan, Fort Wayne.....	December 31, 1922
		13th—H. M. Miller, South Bend.....	December 31, 1920

American Laboratories

CLINICAL AND X-RAY
formerly LABORATORY OF PATHOLOGY AND BACTERIOLOGY

Dr. Marshall D. Molay, Director.

Clinical Laboratory Analyses

Wassermann Test \$5.00

(also other complement fixation tests. Blood or Spinal Fluid.)

Lange Colloidal Gold Test of Spinal Fluid \$5.00

Autogenous Vaccines

In single vials or individual ampules **\$5.00**

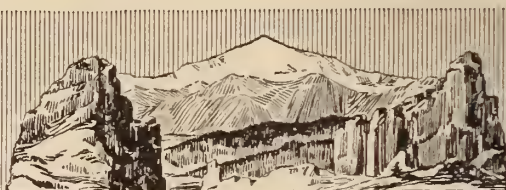
Tissue Diagnosis \$5.00

Accurate analyses of all secretions, excretions and body fluids.

Complete X-Ray Dept.
 Diagnostic and Therapeutic

Mailing Containers on request. Reports by Wire or Mail

1130 MARSHALL FIELD ANNEX BUILDING
25 E. WASHINGTON ST. CHICAGO.



RADIUM

TABULAR APPLICATORS
 NEEDLE APPLICATORS - FLAT APPLICATORS
 and
 APPLICATORS of SPECIAL DESIGN
 Complete Installations of Emanation Apparatus

SOLD ON BASIS of U. S. BUREAU
 of STANDARDS CERTIFICATE

Correspondence Invited By Our
 PHYSICAL, CHEMICAL & MEDICAL DEPARTMENTS

THE RADIUM COMPANY
OF COLORADO, Inc.

Main Office and Reduction Works
 DENVER, COLO., U. S. A.

Branch Offices
 108 N. State Street CHICAGO
 50 Union Square NEW YORK
 LONDON
 PARIS

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., NOVEMBER 15, 1920

NUMBER 11

ORIGINAL ARTICLES

THE PHYSICIAN

"THE GENERAL PRACTITIONER" *

FRANK B. WYNN, M.D.
INDIANAPOLIS

The fruits of specialism have been manifold and far-reaching. Its triumphs for the time have eclipsed the brilliant light formerly shed on the world by the general practitioner. The advent of this new luminary has cast a shadow of despondency over the man in general medicine. He is obsessed with the feeling that he has descended in the scale of professional prestige and respect. His words and his actions commit him to this view. He reflects that in the past he was the most beloved of all men—idealized in literature; admired for his gifts and skill; revered for his charities and honored for his character and civic influence. There passes before his imagination in vivid review the memory of sleepless nights, of jaded nerves, of piteous appeals from the poor and arrogant demands from the rich; of the things he would read and study pushed aside by the things which must be done; of belated vacations and of a thoughtless, thankless clientele turning from the family doctor to shout the praises of specialism. Not strange, then, when he is asked by the stranger if he is a specialist, if he replies apologetically: "No, I am only a general practitioner!"

What has come over the spirit of his dreams? Why have others less worthy perhaps and less serviceful marched past him in the medical procession, with flying banners, receiving the acclaim of the world, whilst he has remained behind, a pack-horse carrying the impedimenta and bearing the chief burdens in the heat of the day?

Although the specialist by courteous conduct is anxious to court the favor of the general practitioner, he not infrequently allows his silent contempt for the latter's judgment to filter through in public. Hence, quite familiar in medical society are the exhortations—not to call fulminant appendicitis, acute intestinal indigestion; not to diagnose "biliousness," when clear-cut physical signs indicate cholecystitis calling for operation; not to delay operative action in hyperthyroidism until hopeless cardiac dilatation has taken place.

The general practitioner is behind in the medical procession first because his specialist colleague is a better runner in the race for distinction. Nor can unfair advantage be charged. Like all lagging ones, he has been distanced. He has lost spirit and ambition to make a record. In this age it begins to look as though the fable of the hare and tortoise would have to be reversed, in its moral of rewards. For in this day fleet action and dynamic energy win life's races. The world is awarding its prizes to the wireless message, the fleet aeroplane, the swift foot, the courageous heart and the alert brain. And so if the general practitioner would recover a front position in the professional race he must speed up; he must show the will to win; he must train for the contest!

Next in importance to these psychologic influences provocative of lethargy and unhappiness in the mind of the general practitioner, comes medical education. Under the older régime, the so-called proprietary medical colleges were incubators of specialism. Those in charge of special departments were aggressive, alert and instructive teachers. Numerically in the faculty, they were greatly in preponderance. And even under the newer régime, with greatly advanced standards of requirement, specialism still exercises a dominant influence, which is apparent in the impression made on the medical student. The fine achievements of specialism are so constantly held before his gaze, that he comes to

* Seventh of a series of articles by Dr. Wynn which will appear regularly in THE JOURNAL.

look on the specialist group as higher in the scale of scientific prestige. His ambitions soon begin to cluster about the pet thought of becoming a specialist. Worse still, he too often comes under the beguiling influence of avarice and the hope of slothful ease. Unfortunately, the idea prevails among students that the mastery of specialism is easy and its returns large; that general practice is hard and unremunerative. One may be sure, therefore, that the young slacker in medicine, hunting an easy job, will soon begin a flirtation with some specialty.

In the parlance of mountain climbing, he is a tenderfoot. The latter gets to the base of majestic and challenging peaks, where from a piazza he gazes at them in luxurious ease. The real climber goes the trails to their limits, mounts the obstructing cliffs, and braves the perilous summit that he may know, and get a breadth of view. A very erudite specialist of national repute recently said to me in conversation: "Whenever you see a young man skipping into specialism early, without thorough general grounding, you may safely assume that he is either superficial, lazy or avaricious. He will be narrow, mercenary, unsafe. He has not caught the true spirit of the genuine physician." The eminent surgeon, Nicholas Senn, often expressed the same sentiment. In the course of a lecture or clinical presentation he was wont to pause rather dramatically, saying: "The surgeon is a *physician* who operates." His implication of course was that he had no patience with the narrow-minded special man; that the real surgeon must have a breadth of view comprehending the whole field of medicine.

It should be no less a part of medical education to teach the economics of medical practice, than to inculcate a knowledge of disease and its treatment; or to hold aloft the ethical principles of medical idealism. For example, it should be shown to students that the monetary returns of specialisms are being cut to a minimum by the acuteness of competition. On the other hand, it should be made plain that the general practitioner, even with smaller fees, yet with longer earning career and cultivated habits of frugality in his professional life, generally accumulates in the end a more comfortable fortune than the specialist. That the general man has for long born unjust burdens will be shown later. The point here made is that it should be the purpose and duty of medical education to give balance in the economic life of the profession and avoid favoritism to any class of practitioners. Nor does this imply the destruction of personal initiative. True medical idealism does not be-

lieve in a unionized scale which will cut the rewards of individual achievement or curtail the well-earned income of honest medical labor.

Unfortunately, the public and private laboratory aids to the general practitioner have been made to bear more than their share of responsibility in reaching the truth in diagnosis. The very brilliancy of these methods has led him to undervalue his own readily available means of ascertaining the facts. Most deplorable is the dearth of interest in the methods of physical and clinical study of cases along well established lines. True, there are notable exceptions to this rule. But to the minds of most general practitioners, unfortunately, the proved methods of physical exploration seem commonplace and unspectacular, compared to the special, technical procedures. Hence, he comes to neglect them. A distinguished internist recently observed to me that in a wide acquaintance with general practitioners he rarely saw a man who had developed artistic skill in physical examination. Here, then, is one of the richest and yet one of the most neglected fields of internal medicine. Ground tilled only superficially will soon wear out. There must be deep plowing which will turn up the subsoil and produce better clinical and scientific crops. By reading and study there must be fertilization of the unproductive spots. As general practitioners let us admit that if we are to maintain rank with specialists we must be as alert as they, in the study of clinical and scientific problems.

A deplorable influence has been exercised over the profession, and especially the general practitioner, by the great pharmaceutical manufacturers. However fine may have been their work in the improvement of old and the development of new pharmacologic products, these benefits have been too often neutralized by sinister methods in the conduct of their business. Great ingenuity has been displayed in gaining the ear of the profession. Their prolific literature floods our mail in such attractive form as to gain attention. Unwittingly one comes under its spell and before he realizes is prescribing or boosting a proprietary remedy—this in spite of the commercial animus which he knows is back of it all. The same commercialized literature stares at us from the pages of medical journals. The shrewdness of these business concerns is also manifest in the courteous detail representative whose good manners and glib accounts of the virtues of proprietaries are injected deep into the subconsciousness of the practitioner. He is at first hypnotized by the suggestions only to learn later that he has been duped.

Is it not true at the present time that certain proprietaries are exploited in the lay press, which the unctious methods of the pharmaceutical manufacturers in former days led us to prescribe and endorse? Once established in professional prestige, obligation was no longer acknowledged to the profession; and now bold and presumptuous appeal is made to the public over our heads. It is humiliating that we have thus so often been led astray. Even greater is the reflection on practitioners, that they have permitted pharmaceutical manufacturers to be their chief instructors and teachers. Granted that some of the published material of pharmaceutical houses is highly scientific and trustworthy; it is more important to remember that most of it consists of insufficiently proved data and glittering claims sometimes bordering on charlatanism. It is almost disheartening to note how many practitioners become a prey to this bombastic literature and thereby allow their interest in better medical reading to lapse. It is unbecoming to the dignity, judgment and intelligence of the profession to rush headlong after the lead of pharmaceutical houses. Yet this is exactly what many practitioners are doing at the present time, in the abusive use of vaccines, serums and the like. Rather let us follow the steady, luminous light shed on medical practice, by standard, current medical literature.

Medical prejudice, centuries old, has left its impress on the civilized world. Even the revelations of scientific truth are slow to combat its baneful influence. Polypharmacy is such—come down to us from the ages past, in modified form. It finds expression still in an occasional practitioner. Always writing prescriptions (and expressing profound belief in them) he gives the public the impression that this is his chief function. The layman comes to believe that he pays *for the prescription*. As for advice about eating, living, thinking, playing, working, resting—these are just gratuities thrown in with the prescription! What more common fallacy clouds the public mind regarding the higher function of medical practice? Yet there are not a few practitioners who ride merrily along the prescription route, never taking the time nor making the effort to find a better road to the refreshing fountain of health. Visit the sick room with such a physician and it is likely to be found stuffy and disorderly; the table littered with abandoned medicine bottles and stale food; a lack of discipline and order in the domestic management. He has not learned that the prescription is a mere incident in the course of a case. In the larger ordering of affairs comes the true

generalship which must be depended on to win the battle.

Near akin to the foregoing is another who freely prescribes but who frankly confesses conviction that Nature, not medicine, works the cure. He prescribes in deference to public prejudice and to satisfy the mind of the patient. To him the *vis medicatrix naturae* will work wonders if but given a chance. He, too, goes confidently on his way with faith implicit in the immunizing forces of Nature. He is a medical reactionary. His faith is both lazy and blind. He seldom studies a case critically. Lesions must be conspicuous and symptoms foreboding to awaken his apprehension. He seldom asks for counsel until the prospect of relief is remote. His inertia makes it difficult to move him. He is the Rip Van Winkle of medicine, who sleeps calmly in the presence of great opportunities and duties. For him the specialist has irate contempt—and justly so, for he dallies when critical study and action might save life.

The endless vexations and monotonous grind of general practice constitute its hardest burden to bear. These are an inheritance of the days when the Doctor of the Old School treated everything. Medical practice was then a killing business. Bad roads, prolonged exposure, extreme irregularity of life made him an easy victim to infections and physical break which cut short the span of his years. For this arduous service, fees were unspeakably small. The public was loath to grant remuneration larger than long custom had prescribed. Other price advances for labor or material were accepted; but any attempt by the physician to raise his charges was met with dogged protest.

Besides small fees there has been handed down the procrastinating habit in their payment—a notoriously common practice of the laity toward the general practitioner. In the city he encounters a floating population, who delay payment and finally move without settlement. In the country he is importuned to wait until the crop is harvested or the stock sold.

Here, then, are most unjust discriminations against the general practitioner. Custom has engrafted on him a penurious financial system. Partly out of the goodness of his heart; more, perhaps from fear that his competitors may reap the benefit should he raise his fees, he permits things to drift at the same old cheese-paring level. By way of contrast he is very likely to think of his specialist colleague who exacts cash and full recompense for the service performed. Instead of railing at the specialist,

it were better to adopt his wiser business principles. The general practitioner must organize and develop the courage to assert his rights. First of all he should, as a group, strive harder to make his service *worth* better pay. This assertion veils a fact. Much of the work he performs is so poorly paid, that his conscience permits him to slight the job. This is not right. It is neither fair to the patient nor to the physician. Do better work and exact larger pay. In cases of serious import make thorough study and examination, and a special charge—not merely a perfunctory investigation and a hastily written prescription. For a number of years the writer has pursued a plan which may be described. In any case in which preliminary investigation shows that a complete examination should be made, I address the patient about as follows: "If you own and drive an automobile, you can better understand my attitude toward your case. Once a year you consider it advisable, in fact, a necessity, to have the machine overhauled. The mechanic takes two weeks or more for the job. Every part is cleaned, the cylinders ground, the carbureter repaired, battery plates renewed, defective parts replaced, and finally, it is all put together, readjusted and runs. You paid a good price for the work but it was worth while. Now you bring me a machine for repair which is infinitely more complex than your automobile. Then do you expect me in the twinkling of an eye to see what the trouble is and by the writing of a prescription to cause your ailment to disappear? Not so. You must at least be as fair with me as you have been with the garage mechanic. A thorough study of your case should be made from every angle. The blood, and excretions must be carefully examined; your temperature, pulse and blood pressure observed from day to day; careful physical examination made under varying conditions; some special determination may be necessary by technical experts. Finally, I shall put the information obtained together and then let us hope the machine will run alright. And for this job which I shall conscientiously undertake I expect to charge you a good round fee."

I have never, except in two instances, had protest urged against the amount named. On the contrary, enthusiasm is aroused in the patient's mind at the thought of the work being done carefully and thoroughly. If he is convinced that the practitioner is sincerely investigating and not camouflaging, he will not demur to a charge which is commensurate with the service performed. At the present time the layman's Mecca for diagnostic knowledge is a

well known clinic. There he pays liberally and ungrudgingly because he feels that painstaking study is made of his case. Let practitioners multiply this idea—more thorough work for which better pay will be forthcoming.

Whilst geographic distinction may be made between city and country doctors, the public has been prone to draw odious comparisons between the two, not at all justified by the facts. The association in the public mind of mediocrity with the country doctor is unwarranted, and often a most unjust judgment. Many of the most alert and progressive physicians I know are country practitioners; and I know just as many engaged in city practice, who are as much strangers to medical reading and study, as if practicing at some frontier settlement. Many a practitioner in the city is lost in the swirling stream of competition; or becomes submerged in a locality where he is bound to a clientele with which he is not sympathetic socially or intellectually. He loses touch with things medical and with medical men. The larger number who rise above these conditions in the city, nevertheless have other handicaps. The selfishness of city life tends to make them narrow, and mercenary. They are prone to digress into side issues—to dabble in politics; to engage in club life; to form the theater habit—all of which may be allowable within limits, yet is fraught with the danger of neutralizing one's professional virility. His hope lies in medical comradeship—professional associations at the hospitals and in the medical society; medical reading clubs; social welfare and public health work.

To the country doctor some respite has come from the severity and monotony of his life, through better roads and the automobile. These have lightened his burden, shortened his hours, and increased vastly the radius of his opportunities. From remote rural locations they have brought him to towns and cities where modern domestic conveniences are available. Educational and social privileges are at hand for his family. Rapid transportation brings them easily to larger centers where all the advantages of city life may be enjoyed without the added expenses born by his city colleague. Nor should one reckon as small the assurance he has of community respect and affection. But there remains an oppressive residuum of drudgery—his small fees and procrastinating debtors; the pitiless grind of daily ministrations and routine dispensing; his belated opportunities for reading, study, rest, recreation and vacations. From the depths of his protesting nature and from the heights

of his aspiration these things call loudly for redress. Uncorrected, these grievances will lead to greater and greater depletion of the ranks of general practice; and the number of specialists will be augmented beyond all bounds of reason or necessity.

What can be done to save the general practitioner, for his own sake and for the pressing community needs? What shall he do to adapt himself to the changing conditions of the time? How can he keep pace with the progress of specialism?

First of all let him remove the *scales* from his eyes, and look up, not down. He must be brought to realize that his job, rightly performed, carries greater responsibilities and larger opportunities than any specialty. At the present time he does not believe this. How can the fact be brought home to him? The truth should be inculcated early in one's professional life. The province of medical education should be to produce high grade general practitioners, not specialists. The latter are a later evolution. Specialists will make themselves. Eradicate from the minds of students the idea that *any sort* of preparation will suffice for general practice. Here, of all places, training should be thorough. History taking, clinical observation and physical examination must be developed by the student to the degree of a fine art. These are the indispensable instruments with which the general practitioner hews a way through the entangling forests of symptoms and signs to the open plains of light and truth. Why cast them aside? When used rightly they yield information just as important as the microscope, the roentgen ray or the guinea-pig. The woodsman were as wise to to cast aside his ax, saying, "I'll clear the forests with a chisel and an augur."

In the next place there needs to be developed among general practitioners an *esprit des corps*—a loyalty and solidarity of effort for mutual betterment. There must be a more frequent mingling of those engaged in general practice, which will beget enthusiasm, clinical alertness, and scientific *morale*. In this way there will be aroused a consciousness of the magnitude and dignity of the work and a pride in the accomplishment of its great tasks. There will come a new vision of the possibilities of general practice.

In the forward march of the profession general practitioners and specialists will cooperate more fully, one with another. The old idea of professional exclusiveness and selfishness is rapidly passing. The medical society has led the

way. Medical men need only to be brought together to prove that their interests are mutual and not antagonistic. *That* man is apt to be a poor doctor who has not as his most trusted and beloved friend *another* doctor.

This spirit of good-fellowship and cooperative effort is becoming manifest all over the country in the assembling of physicians' offices in the same building; or in the more intimate association of men in groups. Practitioners representing both general medicine and special fields are associating themselves not so much for financial reasons as to study medical problems in a thorough manner. But human nature and varying human capability make the plan impossible of universal application. Insuperable difficulty lies first in securing men adequately prepared in the respective fields; and secondly, the uncertainty of harmonious adjustment in determining the relative expense and remuneration of the group members. Complex partnerships are prone to end disastrously. More likely to succeed is a simple partnership of two or three who assume the burden of financial responsibility; and who are willing to pay liberally for special and technical assistants. The group plan has no doubt come to stay. It will prove highly successful in a few instances. In more it will fail utterly because of professional, financial or temperamental incompatibility, of the members. In the very nature of the case only a small number can ever come under such a régime.

A larger question is, what haven may be planted in the greater professional mass that will finally leaven the whole lump? There must come to pass a more intimate association of practitioners. Whilst the medical society has already accomplished incalculable good in this direction, its benign influence should be multiplied an hundred fold. For example, what great professional advantage would accrue if all physicians of accredited standing in a smaller city had their offices in the same building; if they maintained in common a library with all the best medical journals and books; a comfortable room, with attendant and telephone—a center of friendly rendezvous, where it would be customary to meet often; show cases and discuss them; listen to reviews or recent medical articles, show specimens and demonstrate technical procedures. Out of such friendly professional association should grow naturally the impulse to the cooperative study of clinical and public health problems. Many investigations of statistical, scientific or practical value might be undertaken.

In the past data on which professional knowl-

edge is based have come from public institutions. Why should not the larger clientele who pay also contribute to the common fund of medical knowledge? Having different environment, is it not true that careful investigations will probably reveal different results? Conclusions drawn from such observations if systematically and carefully carried out, will tell more accurately of things as they actually exist in practice, than institutional investigations. The study of epidemiology; occupational diseases; problems of hygiene and public health; of work in relation to the cause and cure of cardiovascular disease and tuberculosis; of diet in Bright's disease and diabetes, etc., but give an inkling of investigations which might be undertaken by general practitioners if properly organized and directed.

A problem of especial interest to the general practitioner has arisen from the multiplicity of expensive special examinations, often necessary in obscure cases. Patients of ample means may run the gamut of specialists without protest. But to the man of small income, the expense becomes prohibitive. The latter makes up the bulk of the general practitioner's clientele. This class of patients is entitled to thorough diagnostic study. For their relief the state will in the near future be forced to maintain thoroughly equipped diagnostic clinics. Whether our private interests will it or not, he is indeed blind who does not see that such is the inevitable trend of public demand. Twenty-five years ago, private laboratory workers made cultures for diphtheria, stained sputum for tubercle bacilli, and urethral pus for gonococci. A little later came the Widal test for typhoid, complement fixation for tuberculosis, and now the Wassermann for syphilis—all at first private enterprises, now taken over largely as public functions. The wide range of diagnostic usefulness of the roentgen ray, with its charges prohibitive to the man of ordinary means, will compel ultimately the establishment of public roentgen-ray laboratories, where only nominal charges will be made. These evolutions are working a hardship to private laboratory workers. The public, however, will not concern itself with the interests of a small class. Its slogan will be the greatest good to the greatest number. It ill becomes us as intelligent professional men, to behave toward these changes with reactionary vehemence. Rather let us gracefully accept the trend of events, adapting ourselves to the changing conditions and directing their course.

This brief review of the trend toward state

medicine is given to show what should be its bearing on the general practitioner. Here will soon be placed at his disposal many procedures of diagnostic nature. He will be spared their tedium and escape the expense of their maintenance. Nor does this signify that his work will be less dignified or important. His business will be to correlate and interpret the findings; to look at each disease problem as a whole—the causative factors, the clinical course and the measures to induce prevention, amelioration or cure. He will have more time for reading and study of cases. An awakened conscience and duty will require it. The public will have a right to demand it. The specialists and technicians of public laboratories who will furnish special data for his consideration, are his lieutenants and captains; he must be the general to direct and command. His position is the one of chief responsibility and honor. He should be able to judge wisely of the material submitted. He will study the map of the individual's life, pointing out in its course where past physical defeat has been suffered, and where future foes will lurk. It will be for him to direct the route to pursue, and indicate where reinforcements will be needed in the battle against disease. Such is the position which the general practitioner of the future must occupy, if medicine lives up to its traditions and fulfills its ideals in the future as it has done in the past.

Lastly it should be noted that in this age of pressing commercialism, the general practitioner has been prone to forget the chief recompense for his countless sacrifices and unending drudgeries. Upon the altar of self denial and service to his fellows, he burns out selfishness and narrowness of spirit, leaving precious stones to adorn the crown of his glory. Among these behold eternal friendships and undying gratitude—no less from those high in the walks of life than the most lowly; from the joyously triumphant as well as from the sick at heart and those bowed low with grief. His great heart pours out unceasingly in sympathetic and helpful ministrations. This his greatest opportunity, his greatest reward—a reward which comes not to the specialist! The latter thus misses one of the finest privileges of professional life. Its absence is apt to beget in his nature a materialistic trend toward the level of a tradesman, bidding for business. This the gravest danger of the specialist from which he must save himself.

Fraternity is the watch-word of our time. The tocsin of war on selfishness was sounded 1,920 years ago. Although the world has often

wavered from the ancient exhortation, it has been shaken to its senses by the greatest war of history. This terrible conflict with its immeasurable sacrifice of treasure and countless human lives, has brought a little nearer the brotherhood of man.

The second great lesson taught by the World War is that in union there is strength; and that out of sympathetic and loyal cooperation, arises great achievement. In the profession of medicine a splendid past cheers our hope and nerves our courage for a more glorious future. True to traditional ideals, let us, like the knights of old, train every unit in preparation for the battle against disease. Troops of general practitioners and troops of specialists there must be, but all are of the medical army, to which we owe sacred allegiance.

(To be continued)

LEGACIES OF ASSET AND LIABILITY *

CHARLES H. McCULLY
LOGANSPOUT, IND.

Far back in history it is recorded that one John, in prophetic vision, beholding a throng, inquired of his interpreter: "Who are these in white array?" and was answered. Should any one observing this assemblage inquire of you, "who are these thronging our streets and hotels, banding themselves together in organization for the accomplishment of purpose," I am curious to know what would be your reply. Just who are here represented and what are their purposes? I am calling on you to give an honest, unprejudiced answer.

Who am I and who are these with whom I am associated? Are they different from others and what are our great purposes binding us in organization? How fully are these established in the many individuals comprising the whole? How much of righteousness, of justice and of truth characterize the structure which we are building? What is to be revealed in a fair, honest inventory of the medical profession? Men differ widely in their concepts, and as their concepts differ so will differ their answers to these very pertinent questions. If one will answer, we are they who have earned the right to special privilege and are banded with others of this class to secure these rights permanently and to enlarge our field of special privilege;

another will say, here is an association of superior men who are devoting their lives and energies toward higher achievement in the realm of medicine and surgery, whilst still another group regard this assemblage as a group of public benefactors who are seeking only a higher service for humanity, whose highest ambition is to help the hurt of the world.

Two of the world's great philosophers have viewed us in as widely differing lights. One has said in substance, if the world is ever to accomplish its great purposes, if we are to achieve the great possibilities before us these ends must come about through the doctors. Another, in more recent times, has said: "Until the medical profession becomes a body of men trained and paid for by the country, to keep it in health, it will remain what it is at present, a conspiracy to exploit popular credulity and human suffering." Each spoke believing himself in full knowledge of the qualifications, the ideals and the purposes of our profession and obviously both can not be right. Which is right? Which ought to be the relation we are to occupy in the great scheme of affairs? Do we deserve the high opinion of the one or the severe criticism of the other? If our position is not right what must be done to make it right, or if right what must be done to keep title to this asset? It is this personal and associate inventory that concerns me, and so if you were to inquire of me: "Who are these? I should answer, "These are they who have come down through the ages receiving as a legacy from predecessors certain rights, certain privileges, certain knowledge and assuming certain obligations, each age adding to the legacy, sacrificing certain assets, discharging certain obligations and assuming others." We have known the age of the priest, the age of the astrologer, the age of the necromancer, the age of the scientist and shall I say the age of the commercialist? Each age has left its impress on the end product, and we see in the profession today marks of the priest, the astrologer, the necromancer, the scientist and the commercialist. The priest wrought his cures through incantation and prayer and a very imperfect knowledge of drugs. The Christian Scientist and the faith healer seek to heal through the mind alone, whilst we of the medical profession attempt to combine these methods though reversing the order of the priest, placing chief reliance on drugs and surgery, the material elements of healing, and secondarily calling in to our aid the psychic elements, attempting to mind cure a very considerable percentage of our patients. The astrologist read

* President's address, Indiana State Medical Association, South Bend Session, September, 1920.

the stars and interpreted dreams, deducing therefrom the ailments of mankind and their remedies, whilst we enter into psycho-analysis and interpreting the dreams of earlier days pave the way to health. The necromancer resorting to trickery and magic has his counterpart in the air of mystery which completely envelopes the efforts of many practitioners of today, and in the trickery of the mendacious practices of those who make to order their gallstones out of olive oil and an alkali, and slip a methylene blue pill to those whom they wish to convince of a kidney disease, who regularly employ a force of rubber tapeworms to the enrichment of their pockets. And so with the commercialist. He has so entered into our work that we are indeed in danger of losing title to the distinction of profession and becoming mere business men, tradesmen. Indeed, the idea of commercialism has so crept into our work and our association that it sometimes seems to have overshadowed those greater purposes of the profession as set forth in the constitution of this association.

Coming down through all these years there are certain legacies of fundamentals, foundations of medicine and surgery, which are ours in tenure only; which are in no sense ours in fee simple; legacies which carry with them the right to use, yet not alone the right to use but also the obligation to use, legacies, which we have in no sense bought and paid for, which indeed we could not buy outright, but which must be guarded and preserved and passed on to coming generations with accrued earnings else we must be accounted not alone failures but defaulters. These legacies are the inalienable right of future generations, having been earned by the unceasing endeavor and sacrifice of many generations and bequeathed to you and to me not as individuals but as trustees for humanity. Even if one were disposed to purchase these legacies outright the immeasurable value is prohibitive, more than the dollars any individual has ever been able to pile up, more than any individual might ever hope to accumulate in a lifetime of sacrifice and endeavor. These legacies are to be preserved inviolate, removing here and there a portion of the structure only when a proven better part is to replace the discarded, always conserving, rebuilding and building around that cornerstone which must be the essential of permanent structure, Service for Humanity.

These legacies of immeasurable value, what are they? I answer they are innumerable, but a part of them may be grouped as follows:

Esteem and confidence. No calling has so established itself in the esteem and confidence of humanity as that which we represent. Think back but a few years to the age of the old family doctor, and who ever was so high in esteem and confidence as he? Not even the priest. How many times have you and I heard these men lauded to the skies, and how many times have you longed for a return to the days when the doctor knew his families and they knew him even as the shepherd knew his sheep and they knew him? Have we fallen from this high estate? Do we no longer hold this high esteem and confidence? If so have you inquired why? Is it not that we have exploited, that we have not kept faith with those who trusted us, that we have lost sight of that sacrificing desire to serve; that that personal interest in the welfare of our people has become subservient to the desire to serve and to aggrandize self? Have we not commercialized this esteem and confidence, seeking to appropriate rather than to preserve this legacy inviolate and to hand it down to coming generations? Have we not lost much of this valuable asset in thus seeking to appropriate that which has never been ours other than in tenure?

Leadership, another of these legacies: Have we held on to our leadership? Do men come to you as they once did to to your immediate predecessors, the old time doctor, for advice in affairs other than the health of himself and his family? Few men can lay claim to the full value of this legacy. Have you sought earnestly to determine the why of this lost leadership? If so, have you not found it possible that the answer lies in a failure to keep yourself as far in advance of general public enlightenment as did the doctors of the old school?

Medical laws are a part of our legacy. They have evolved through many ages. They give to you certain rights and privileges which are denied to others, but they also make certain requirements of you. These laws, have you ever inquired just why these laws have been enacted? Too often, I fear, we of the medical profession are prone to regard these statutes as written expressly for our own protection, as our own peculiar asset; but not so. A law which has for its purpose the protection of a special class or which is enacted for the purpose of extending privilege to a certain class is contrary to public good and can not hold in any land. Our venerable leader, Dr. William N. Wishard, in writing the present law regulating the practice of medicine in our own state had no such idea in mind. The primary purpose of

this law is protection to the people at large, and if certain privileges and certain protections are offered you in this law they are incidental and secondary and are to be paid for in a higher service to the people. Therefore, when you seek to invoke this law to the suppression of the Christian Scientist in his efforts at healing, when you seek to estop the chiropractor, the faith healer and the miracle man you must do so, not to secure to yourselves greater opportunities to accumulate wealth, but to protect humanity against fraud and deception, else you do not come into court with clean hands, as is required, and you must expect to lose your case if fought on these grounds. So, too, when you seek to promote or to restrict legislation regulating the practice of medicine and surgery, you must go to the legislature prepared to ask for protection to the public and not self-protection. When you oppose the proposed laws of health insurance, if you expect to win this fight, you must be prepared to show that such legislation will not only fail to secure to the public better service but will indeed tend to lower standards of service and will work harm rather than good to the public at large. A legislature is not much concerned in the particular and peculiar interests of any special class, and could not even if it so desired be governed in its acts by the needs or desires of any special class. The prevention of this proposed legislation must depend on your ability to convince a legislature of its failure to provide the protection to the public which it purports to afford. Why, even the first laws regulating the practice, laws on which fundamentally are based all suits in malpractice today, were enacted for the protection of the people. Selfishness must be abrogated if we are to continue, if we are to advance. These laws are not builded for you, but for the people and, to repeat, the privileges, the protections which they offer are only incidental and secondary. The fundamentals are legacies of obligation. If you seek personal protection against the various cults and isms you must expect only to find this protection in a higher, better service, for suffering humanity runs after strange gods in medicine only because we to whom they have for so many ages been accustomed to bring their ailments have failed them, and we must look within to find the cause of their desertion. Our defense lies in a better preparation to deal with the frailties of the race. We must be qualified to understand the psychic forces and to utilize them in our art. We must reestablish relations of confidence, and must educate our

patients as to the limitations applying to the healing art, and when we have so prepared, so established relations of confidence, so educated, we will have no cause for concern over these cults that thrive on our failures.

Medical knowledge—one might discourse for hours on this phase of our inheritance. The discoveries of anatomy, of surgery and of medicine, the sacrifice and energy with which these were secured to you and to me are matters of history well known to you all. What one of us could hope to equal the attainments of any two or three of the great history makers in medicine, much less the combined results of all their efforts? Happy indeed must one be if to all this legacy of knowledge even a little may be added and nothing lost, ever remembering that the legacy is one of tenure only.

But, as I have intimated, our inheritance has not been alone of privilege, of endowment. There are legacies of responsibility, of opportunity, if you like the term better, which may not be disregarded. The one cannot be accepted without the other. There is first the responsibility of teaching. The esteem, the confidence, the leadership, the laws and the knowledge of legacy must be passed on to those who are to succeed us if we are to be regarded as other than defaulters. It is a beautiful and practical law which provides that these assets must be given to those into whose hands must be given the health and lives of coming generations, and so we have inherited the obligation of instructing our successors. No secreting, no hoarding, no selfishness; only a liability, a liberality in recognition of the service which has been previously rendered us; a recognition of the rights of all to the scientific attainments of sacrificing martyrs. Who would have done honor to a Pasteur who would have taken to his grave his wonderful discoveries in bacteriology? Who would have done other than curse the memory of a Koch who would have kept the world in ignorance of the tubercle bacillus, on the basis of a few paltry dollars? What nation would have reared monuments to the memory of a man who knew how to eradicate yellow fever and refused to divulge his knowledge? God bless a medical profession whose choicest discoveries, whose most valued possessions are given freely in the service of humanity.

Charity—not the fostering of pauperism but a loving service for deserving poor. It is your great privilege, a choice legacy of responsibility and one which ever is recognized by all men worthy the name doctor.

In the matter of public health there are cer-

tain responsibilities which are yours, obligations which I fear too often have been regarded as incidental to laws conferring certain privileges and protection, but the reverse is true. The privileges and the protection are incidental and secondary, and the obligations fundamental. The law gives you the privilege of treating communicable disease, but this is only incidental. The fundamental is the demand that the public be protected in your proper preparation and the proper performance of your duty in the reporting of these communicable diseases, and in disseminating a knowledge which will tend toward their abrogation. The law gives you privilege and protection incidentally in the practice of midwifery, but fundamentally it requires preparation and a report of all births. It requires methods of prevention of ophthalmia neonatorum. The law gives you a right, incidentally, to treat fatal diseases, but fundamentally requires preparation and a report of all deaths. In other words, your privileges and protection are all incidental and secondary, as stated before, and your requirements are primary and fundamental, based on public good. I think I may go further and say there is an unwritten law which demands of you, in recognition of your special privileges, a guardianship of all matters pertaining to the general health of the public at large. It is your patriotic obligation, for none other can safeguard the health of the commonwealth and without health the nation fails. Rome fell because her physicians failed to solve the problem of malaria, and yet her mythologists were not far from the solution. Witness the myth of Apollyon and the Serpent. The problem was solved in more recent times and we have the Panama Canal. An earlier great people passed into history because of a failure on the part of her physicians to solve the problem of the plague. Yellow fever threatened the very life of a great part of our own country, and a physician solved the problem. Tuberculosis has crippled us for ages. We are just now beginning to see the light through this great shadow and yet Dr. Hurty will tell you, I am sure, that you are not 20 per cent. efficient in observing the fundamental law requiring you to report cases of tuberculosis that people may be reached personally and taught how to get well and how to avoid transmitting the disease. "How, then, shall we escape?" As certainly as Rome sickened and died through the devastations of malaria, as certainly as that older people fell through devastation from the plague, so are we as a nation crippling ourselves through the venereal diseases. Statistics are appalling.

The problem is the problem of the medical profession. What are we proposing to do about it? Will we recognize this responsibility and fight this menace to our national welfare, or will we for a few paltry dollars and a false notion of loyalty to friends secrete an offender against society and so help to pull down the foundations of our government? The insane, the feeble-minded, the criminal, the epileptic, these are all our problem. We are breeding these defectives faster than we can build institutions to care for them, and their relative frequency in any community is so rapidly increasing as to have become alarming. We must do something and just what we are to do is for the medical profession to say. We must solve the problem or as a nation acknowledge defeat. It is a legacy of responsibility which we can not disregard. We must enlighten ourselves, must teach others, must sacrifice selfish interests to the end of solving these problems. This is an age of specialists, so give us specialists in matters of health in every county and large city and let us give these men our support, demanding of them leadership to freedom from preventable disease and weakness, forgetting self in the interests of humanity.

There is one further legacy of responsibility—to keep ourselves clean, high-minded, efficient, free from all trickery, all selfishness. If we are to avoid severe criticism, if we are to be held in lasting esteem and confidence we must clean house. There must be no countenancing of chicanery or exploitation. There must be no underhanded methods. All relations between us and a public whom we seek to serve must be open and aboveboard, must bear the closest scrutiny and must appear quite free from selfish interest. No other course is possible, and where any other is the practice the guilty must be either converted or must forfeit all rights to fellowship, must become an outcast.

But I hear you objecting that these are high ideals. True, but are they too high, are they impracticable dreams, are these positions untenable? Can one so practice his art and live? Does it pay to hold on to these ideals at the expense of much business and many dollars? In answer I wish only to inquire what are your ambitions? Have you alone the ambition to pile up dollars? If so, you have no place in the high calling of medicine. The world has ever seen fit to erect monuments of stone and tablets of bronze to commemorate the memory of her military heroes. She has hallowed the memory of her great men in the affairs of state, but she has permitted the bones of Dr. Jesse

Lazear, who gave his life to the solution of the yellow fever problem, to lie for years in an unmarked grave in the South. If you hold to these ideals you must be content, more than content, even happy, if to you may come an end such as came to the beloved Dr. McClure of the Glen. Does it pay? Can it be made to pay? Let me remind you of One whom the world refused to accept, who was spat upon, scourged, who wore a crown of thorns, was crucified; Him whom millions today accept and to whom millions bend the knee in adoration. Does it pay? Somehow I like to believe the poet has answered for us.

Abou Ben Adhem (may his tribe increase!)
Awoke one night from a deep dream of peace,
And saw within the moonlight in his room,
Making it rich and like a lily in bloom,
An angel writing in a book of gold.

Exceeding peace had made Ben Adhem bold;
And to the presence in the room he said,
"What writest thou?" The vision raised its head,
And with a look made of all sweet accord,
Answered, "The names of those who love the Lord."

"And is mine one?" said Abou. "Nay, not so,"
Replied the angel. Abou spoke more low,
But cheerily still; and said, "I pray thee then,
Write me as one that loves his fellow men."
The angel wrote and vanished. The next night
It came again, with a great wakening light,
And showed the names whom love of God had blessed;
And, lo! Ben Adhem's name led all the rest.

PROBABLE STRYCHNIA POISONING FROM HINKLE TABLETS

CASE REPORT

A. M. WINKLEPLECK, M.D.

ELNORA, IND.

In reporting this case I shall deviate from the conventional method of reporting cases, more to show what the country physician is up against at times than for any other reason.

On May 13, 1920, about 1 p. m., I was hurriedly summoned to the home of F. E., 11½ miles in the country, he stating that his little girl, 3 years of age, was having a "spasm or something." When I arrived I found the little girl in her mother's arms, looking rather wild and with occasional jerky movements of her arms. Her pulse was very rapid and strong. A neighbor lady who had been passing and summoned in was giving a strong salt solution for worms, saying that it was a worm spasm.

My first impression was that of strychnia poisoning. I quickly questioned the parents if the girl had eaten anything unusual. They replied that she had not, and that she had not

been out of the house that forenoon. I then asked if they had any rat poison, mice poison, fly poison, or medicine in the house, which she had gotten. They replied in the negative. Still I was confident that it was a case of strychnia poisoning and told the parents so. I also informed them that her chances for recovery were very small.

Since the girl had already had one convulsion no emetic was given nor was any attempt made at evacuation, fearing that either might start a new convulsion. Neither was morphia or chloral given. Quiet was maintained in a darkened room, and warmth applied to parts needing it. In about twenty minutes after arrival a second convulsion occurred, and left no doubt about its being a strychnia convulsion, for it was a typical textbook convulsion. Chloroform was inhaled to ally the tonic contractions, and artificial respiration given until respiration again started. This convulsion had hardly abated and respiration begun to approach normal when a third and fatal convulsion, much harder than the second, occurred. Chloroform and artificial respiration were of no avail, for the body had scarcely become rigid when the patient became very cyanotic and the heart's action ceased.

After the parents had sufficiently recovered from the shock, strict questioning revealed that the girl had been found in the front room about 10 o'clock that forenoon with a box of Hinkle tablets poured out in her lap. It also developed that the mother had given the girl a Hinkle tablet for catharsis that morning. This I consider entirely too large a dose for a child of 3, but the mother said she was in the habit of giving a whole tablet for this purpose. The girl having been given a tablet that morning, together with the tablets being a bright pink color, left no doubt in my mind that several of the tablets had been eaten. How many could not be determined, for the family did not know how many tablets were in the box. A count shed no light on the number eaten. No other avenue was open except that the girl had eaten enough of the tablets to give her strychnia poisoning.

I know there is room for doubt in this case, for I do not know definitely that the girl ate a single tablet from the quantity in the box. But for reasons given above I think I am safe in assuming that the tablets were the source of the strychnia. Wilcox says that the smallest dose of strychnin known to have proved lethal in an adult is 0.5 grain. How much idiosyncrasy may have existed in this particular patient I do not know. But for the purpose of calculation let us assume that 1 grain be the lethal dose for an adult. From Cowling's rule for calculating the dosage for children, a child of 3 years should receive one-eighth of the adult dose. Since each tablet contains ⅓ grain of strychnia, it would require only seven and one-half tablets to

give a total of 0.125 grain of strychnia. But the child already had $\frac{1}{60}$ grain in her system. Then if she ate seven or eight tablets from the box, the total quantity of strychnia would be raised slightly above 0.125 grain, which we have assumed to be lethal for this patient. Yet she may have eaten more than this number.

Let me repeat that, no matter how skeptical others may view the case, I am thoroughly convinced that this is a case of strychnia poisoning from Hinkle tablets.

I might also add, although it has no definite connection with the case reported, that this family is very careless with medicines and drugs about the home, for on August 24, I was again called hurriedly to this same home to treat a 4-year-old boy who had drunk a solution of lye which had been placed in a drinking glass to cleanse it. The boy and his mother were visiting at this home. The boy was saved, however, and has almost completely recovered. The lye solution happened not to be strong enough to cause any permanent injury. At least nothing has developed at this writing. What may develop later I do not know.

LOCAL INDICATIONS FOR TONSILLECTOMY AND ADENOIDECTOMY

JOHN W. CARMACK, M.D.
INDIANAPOLIS

The tonsil and adenoid are universally recognized as organs or tissues, which, by their hypertrophy and obstruction or retention of infecting organisms, may and do produce secondary pathology in other parts of the body. A wealth of literature and statistics has accumulated, describing many diagnostic features and secondary diseases. In order to be able to advise correctly and work intelligently we must, at times, stop and boil down the mass of literature into everyday, practical indications of primary disease in these tissues.

The time has passed when tonsillectomy can be advised only for decided obstruction or frequent, severe tonsil inflammation, or, on the other hand, on account of a moderate amount of healthy lymphoid tissue in the throat. An erroneous idea has prevailed with some that tonsillectomy and adenoidectomy is of minor importance. In some instances this is true. The same obtains in appendectomy, herniotomy, etc.

The tonsil and adenoid are frequent offenders. They are fairly accessible. Most patients recover, although the mortality rate is higher than it should be. These facts have probably, at times, led to hasty opinions and surgery. Any adult subjected to tonsillectomy will at least

be cured of his idea of its insignificance. Observation of a series of cases as to shock, loss of weight, the effect of surgery and anesthesia on co-existing or secondary pathology, will prevent any conscientious doctor from advising surgery without some definite indication. On the other extreme, there are those who require some secondary and often permanently damaging pathology before they feel justified in advising surgical intervention. There is nearly always continued local pathology in the lymphoid tissue of the pharynx, with definite local indications, before secondary or distant pathology occurs. In order to increase our efficiency, this is the time at which positive intervention of some nature must be taken.

The tonsil and adenoid are masses of lymphoid cells, held together by a scant framework of connective tissue and are directly connected with the deep and superficial cervical lymphatics. Probably most of our authorities believe these structures have distinct bactericidal properties when in a normal condition. At least it is agreed that where there is no continued infection or hypertrophy these tissues are not a detriment and probably beneficial. It has, however, been demonstrated that repeated infections produce a swelling and increase in the number of lymphoid cells, with a hyperplasia of the connective tissue framework and resulting loss of bactericidal power. Later on, as infections recur or continue, and particularly as adult life is reached, there is destruction or atrophy of the lymphoid cells, with marked connective tissue hypertrophy in which bacteria often retain a decided virulence and apparently, at times, find a favorable place for growth. The stage at which the resisting power of the lymphoid tissue has been destroyed and has become a menace, can be determined only by a careful history and observation of the individual case.

The concensus of opinion among laryngologists and pediatricians as to the local manifestations in children which indicate necessity of tonsil and adenoid removal seem to be:

1. Obstruction to breathing and passage of food.
2. Recurring attacks of tonsil and adenoid inflammation, usually meaning two or more definite attacks.
3. Frequently recurring or continued cervical adenitis when not due to some general glandular disturbance.
4. Firmly adherent tonsils to the pillars and lateral pharyngeal muscles.

The appearance of the tonsil in the throat is of minor importance except as to size in regard

to obstruction. The adenoid, due largely to its location, is the chief offender during childhood, on account of obstruction to the passage of air, and even a moderate obstruction in the air passages from any cause not only produces general disturbance but always a local irritation and inflammation as well.

Any child who has frequent or persistent nasal inflammation should be examined for hypertrophied or infected adenoid. Chronic nasal and postnasal inflammations during childhood produce many of the ear troubles of later life. Accessory sinus disease is frequent among children and young adults and usually follows nasal infection. The sphenopalatine ganglion, the chief source of nerve supply to the nasal mucosa, is located on either side of the epipharynx and may manifest its injury from infection by an atrophic rhinitis.

The time at which the tonsils and adenoid should be removed does not depend on whether the individual is 3 or 30 years of age, so much as whether there is sufficient trouble to produce complications.

Local manifestations of infection in the adult tonsil may be severe and easily detected but are apt to be less obvious, and many times it is extremely difficult to say there is or is not a focus of infection present. Statistics from a series of cases at the Mayo Clinic show that 60 per cent. of arthritis cases improving or recovering after tonsillectomy have never had an acute follicular tonsillitis. Yet in nearly all such cases a careful history and examination will reveal one or more of the following.

A history of irritable throat with a muscular soreness and stiffness particularly in the morning and subsiding during the day. The appearance of the tonsil as to contour is of little value, but a continued dull red appearance of the pillars and surrounding mucosa is of considerable value. Expression of pus from the tonsil crypts when there is no acute inflammation is evidence of continued infection, but this is not always possible because many times the pus or organisms are buried deep in the tissues. There is practically always persistent tenderness of varying degree when direct pressure is made on a chronically diseased tonsil. A firm adherent tonsil is the result of prolonged inflammation and adhesions, and frequently is of value in diagnosis. Cervical adenitis without general glandular disease is evidence of infection in the head, but, more often, a tendency to stiffness and soreness near the center of the sternocleidomastoid muscle is present, as a nest of deep cervical lymphatics lie directly under the center of this muscle and the tonsil lymphatics are directly connected.

The laboratory is of relatively minor importance in diagnosing these cases, as surface cultures do not persistently correspond to the deep infection found after tonsil removal. Crypt cultures are very unsatisfactory, as it is almost impossible to obtain one without surface contamination.

As an example of local infection with mild yet definite symptoms of long standing, I want to briefly report a case.

Mr. R., 24 years old, was referred to me in September, 1919, with acute mastoiditis of about ten days' duration.

Past history: Measles, mumps and pertussis during childhood, no complications. No serious illness since. Has been somewhat susceptible to colds and irritation in the throat, since childhood, but has never had tonsillitis. For about ten years has suffered frequently from soreness in the muscles, and from distinct attacks of lumbago, lasting for several days at a time. Two weeks previous to the time I saw the patient, he complained of a raw throat without an acute cold. His left ear began aching, gradually getting worse until two days later when the drum ruptured. He experienced relief for a short time, then a gradual increase in pain in the entire left side of the head.

Examination: The nasal passages were subacutely inflamed, with some congestion of the mucosa. No decided obstruction present, no evidence of accessory sinus disease. The pharynx presented a dull red, moist mucosa, particularly in the tonsillar region. Some of the tonsillar crypts seemed to be filled with a dirty gray substance, which could not be expressed. The tonsils were of moderate size, hard and firmly adherent. There was very slight tenderness over the tonsils, with a few small cervical glands palpable. The right ear was normal. The left ear and mastoid presented evidence of acute suppurative mastoiditis which was confirmed by roentgen ray and operation done. Culture from mastoid at operation showed streptococcus nonhemolyticus and diphtheroid bacilli. After recovery from the mastoid operation tonsillectomy was done. The tonsils were sectioned and cultures made. The culture shows streptococcus nonhemolyticus and diphtheroid bacilli. There is little doubt that this mastoid resulted from a chronic infection in the throat. This man has not had a recurrence of his lumbago since his tonsils were removed.

In conclusion let me emphasize the fact that there is nearly always continued local pathology with distinct indications in or about the throat before complications occur. Better case histories and more careful examination of these local structures will prevent overdoing or underdoing throat surgery, and will prevent many secondary diseases.

THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

NOVEMBER 15, 1920

EDITORIALS

**THE MANAGEMENT OF SQUINT IN
YOUNG CHILDREN**

The frequency with which parents receive advice from family physicians to the effect that squinting eyes in children should receive no attention because the child will "outgrow" the condition, justifies us in the belief that there is room for considerable needed education concerning the danger of such teaching. It is not necessary to discuss all of the various phases of this subject, including an enumeration of the several types and causes of squint, but attention will be called to the commoner form, or what is technically known as convergent concomitant strabismus. In this form of squint there is a deviation inward of the visual line of one eye, and it generally is associated with hyperopia or farsightedness, with or without hyperopic astigmatism. It usually begins in early life between the first and fifth year, or when the child begins to use his accommodation for seeing such near objects as toys and pictures, though occasionally squint is seen soon after birth and is even considered in a few instances to be congenital. At first the squint may be noticed only at times (periodic) with near vision, or when there is any interference with the general health, but it is apt to become constant for both near and distant vision. The acuteness of vision in the squinting eye often presents considerable reduction as a result of the optical error, and there may be amblyopia as a result of diminished function not due to visible changes in the eye.

The frequent association of convergent squint and hyperopia depends on the close connection between the accommodation and convergence. A child who is hyperopic must use some accommodation for distance and more for near vision. Accommodation and convergence being associated, he must increase his convergence with the increase of accommodation. In looking at a near object the stimulus to converge corresponds not only to the amount present in the emmetrope, but includes an additional and abnormal amount called for by the extra accom-

modation required to compensate for his hyperopia. Hence, the point of convergence is nearer than the distance accommodated for, and convergent squint results.

The treatment of squint comprises the correction of refractive errors by glasses, exercising of the squinting eye by occluding its fellow, instillation of atropine, the training of the fusion sense, and operation. The nonoperative treatment is successful in a large proportion of cases of convergent concomitant squint if begun sufficiently early. The earlier such treatment is begun the better the results. After the sixth year it is not usually effective. The error of refraction should be determined by a retinoscopy under atropin, and glasses which correct very nearly the total hyperopia and astigmatism prescribed for constant wear. Glasses may be worn by children of 2 years and upward, though it usually is advisable to keep the eyes under the influence of atropin for several weeks in order to put them at rest and relieve the overtaxed muscles, as also to enable the little patient to become accustomed to the glasses more readily. The use of the patch or bandage over the fixing eye, as well as the use of atropin in the fixing eye, thus compelling the patient to use the squinting eye for seeing close objects, are measures which often prove beneficial but do not do away with the necessity of wearing glasses. Training of the fusion sense with stereoscopes has proved useful in selected cases, but as a general proposition is unsatisfactory as a direct result of the difficulty in getting the cooperation of the child as well as the sanction of the parents. Operation is seldom if ever indicated until after nonoperative treatment has been given a trial, and should not be undertaken before the 7th year of age.

Of most importance is a recognition of the fact that squint in children in a very large proportion of cases is due to a refractive error which should be corrected by appropriate glasses as soon as the squint is detected. It is the height of folly to expect the child to "outgrow" the trouble, and it is equally detrimental to the best interests of the child to have the parents object to the wearing of glasses for cosmetic or sentimental reasons. Furthermore, in the prescribing of glasses for young children care should be exercised in securing appropriate lenses, and competency in this matter is only obtained through the ability of the examiner to do an accurate retinoscopy which must be made with the little patient under the full effects of atropin. With the prescribing of glasses should go the explanation to the parents as to why the

glasses are required and why they should be worn continuously. No child is too young to wear glasses that are required to correct a defect that gives promise of producing serious results, and no physician or parent should, through sentimental or other reasons, place obstacles in the way of accomplishing the results that may be accomplished in the correction of squint in children.

ELECTION RESULTS FROM THE MEDICAL STANDPOINT

Now that the election is over we can settle down to serious work. Probably the country would not have gone entirely to the bad no matter how the election went, but judging from the overwhelming sentiment expressed at the polls it was very evident that a very large majority of the men and women of the United States felt that a radical change was indicated. In Indiana, aside from any decided opinion concerning the League of Nations and other topics of argument during the campaign, the medical men were interested in the election of candidates who are in favor of upholding or even improving on the present educational standards as applied to the practice of medicine. During the campaign it was boldly stated that the medical profession could expect more from the Democratic candidate for governor, Dr. C. B. McCullough, and perhaps the medical profession could expect more from a reputable medical man in the governor's chair. However, the Republican candidate for governor faithfully promised that if elected he would not only uphold the present medical standards but would favor any raising of the standards for the practice of medicine within the state. Concerning the multiplicity of boards he emphatically stated that he not only was in favor of one medical board but was in favor of one standard of requirements for any and all who desire to practice medicine in Indiana. We have sufficient faith in Mr. McCray's pre-election statement to justify us in believing that as governor he will carry out his promises.

So far as state senators and representatives are concerned we are fortunate in having elected a number of men who are distinctly in favor of upholding or improving the existing medical standards. Unfortunately, through the apathy of the medical profession, a few men known to be antagonistic to the regular profession will go to the next legislature. As a notable example of this the president and founder of a chiropractic school in Fort Wayne quietly secured

the nomination for representative on the Republican ticket, and while he faced the opposition of the medical profession he was carried into office along with the general landslide. It is not likely that he will do any particular harm, and yet he undoubtedly has gone after and secured the position in the legislature with the one purpose of lowering the present medical standards so that chiropractors and other incompetents may secure legal approval in Indiana to practice their peculiar beliefs on the sick and suffering. The fact that he secured his nomination and afterward his election without any very active objection on the part of the regular medical profession shows with unerring certainty the necessity of medical men paying more attention to politics. Usually places on the state legislative ticket go begging, and seldom do reputable men want such positions. The worst human skunk in the community often can secure a place on the legislative ticket if he goes after it and pulls the wires right. Many times his opponent is no better than he is, and we all bemoan the fact that we are obliged to cast our ballots for such misfits, though we have no one to blame but ourselves since we let the nominations go by default. If we are ever going to get anywhere in securing decent legislation, whether it pertains to medical and public health affairs or anything else, we must take a hand in politics, and the kind of politics that creates tickets made up of representative men.

THE SMALL SALARIES OF CONTRACT WORK

It is enough to make the angels weep to note the frequency with which advertisements appear in medical journals offering salaries of from \$1,200 to \$1,500 per year for resident physicians in various public, benevolent, and industrial hospitals, or for physicians for various organizations. As a rule the qualifications demanded are those of a university graduate, a diploma from a Class A medical school, and one year's internship in a good hospital. Sometimes it even is suggested that the applicant must possess a pleasing personality and be tactful in handling people. *Ye gods*, and all this for \$100 per month for time and knowledge! Even street sweepers would laugh at such an offer for their work, yet we are told that our work is humanitarian and we should not be looking for high salaries. Of course nothing is said about the time and money spent in preparation or the present necessity of having three square meals a day and a comfortable home for ourselves and

our families, sufficient money to educate our children and provide better equipment for the care of our patients, let alone a few extra nickels for movies or that the kids occasionally may have "a soda." The worst of it all is that there are some doctors who would rather starve on such an income than get out and earn twice as much as a common laborer, and all because the time, money, and exertion put forth in becoming a professional man demand that professional work shall be the life work no matter what injustices may be heaped on his luckless head because, like a willing horse, he stands it. Isn't it about time for doctors to get away from the idol worship of professional ethics and adopt the methods in force with any other vocation, namely, methods of self-preservation? It is all right to speak of the "high ideals" of our profession, but to uphold a "square deal" is the principal item of ethics we should respect, and if we give the square deal to others we should expect the square deal in return. If we follow this, we shall see fewer charity patients come to our free clinics in expensive automobiles and wearing diamonds, and we shall see fewer poor organizations like the insurance companies and industrial corporations securing the best medical and surgical services for less than is paid for scrubbing floors.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

AGAIN it is time to pay medical society dues. Why not surprise your county medical society secretary by sending in your dues for the coming year without being solicited?

THERE are altogether too many medical societies, but likewise there are altogether too many medical books. There is really no excuse for the publication of about 75 per cent. of the

medical books that come from press. Most of them are mere compilations, and the only reason for their appearance is the desire on the part of the author to advertise himself in an ethical way.

THE life of a medical editor is not a bed of roses, for during the last three or four years the cost of labor and material, to say nothing of other vexatious problems, has made the publishing business decidedly uncertain and unsatisfactory. Beginning with the New Year we start out with a new arrangement as to publication, and we hope that the members of the Association will bear with us if THE JOURNAL at first fails to come up to its former size and mechanical excellence.

A "CHIROPRACTOR" of Waukesha, Wis., emits (at advertising rates) the following words of wisdom on the pathology of gallstones and kidney stones:

Gallstones are due to an excessive amount of heat in the gallbladder which crystallizes the calcareous material in the bile and forms stones. This excessive heat results from the loss of calorific or heat control of nerves due to nerve pressure in the middle dorsal vertebral region. Adjustment of the causative subluxation restores the condition to normal. Renal stones are caused in the kidneys in the same manner.

This is the sort of medical "information" that is being fed to the public by the cult calling itself "chiropractic"; and unfortunately the public is not in a position to realize its grotesque nonsense. But even to suggest that those who would treat human ailments should be grounded in certain educational fundamentals is to violate the tenets of "medical freedom"!—*Jour. A. M. A.*, Oct. 30, 1920.

IN speaking of needed legislation, there is no occasion for saying that the medical profession should have protection. Of course we have laws to protect various industries, but no one ever thinks of advocating a law to protect the professions, even though it is entirely consistent to expect the passage of such laws as a mere act of justice. What we do need and should have is adequate protection of the public from incompetents, and from chicanery as exemplified in the practice of the quacks and the pseudo-medical cults. We do not need a multiplicity of boards, as one board is quite sufficient to pass on the qualifications of those who desire to practice medicine in Indiana. A uniform educational standard is not only necessary, but

the only fair way to protect the public from those who are not qualified to treat the sick. All should be required to pass the same examinations in all of the fundamental sciences on which the treatment of diseases must depend, leaving out the therapeutics of various schools.

THERE is little new to be said on the subject of fee-splitting, but in an editorial just published in *The Journal of the Medical Association of Georgia*, Dr. E. C. Thrash says some of the old things in a new way. He classifies fee-splitters into three types: innate crooks; impecunious young men who resent the fact that much work goes to older men who are their inferiors in ability, and men who do not fully comprehend the heinousness of the offense. Class 1 he considers irreclaimable; such men, he says, would even take an oath not to split fees and then continue the practice. Men in Class 2 reform they become more prosperous, and Class 3 is made up chiefly of men who do not analyze the ethics of fee-splitting, considering only that they have performed service and are getting their due. The appeal is made to young men that they bear a little more sacrifice and have the satisfaction of looking back on a career wholly honorable. Class 3 is asked to recognize the value of honest service and to collect a fee for it openly. The man with a conscience needs no better guide.—*Jour. A. M. A.*, Sept. 11, 1920.

THE idea of taking postgraduate work to the door of the doctor instead of compelling him to go to metropolitan centers for it is worthy of the serious consideration of all state medical associations, our own included. The need was mentioned in the report of the Committee on Hospital Standardization, presented at the South Bend Session, and the subject was referred to the Committee on Medical Education. As proposed, the scheme embodies an arrangement for giving clinics and postgraduate teaching to small classes in the various councilor districts of the state. These postgraduate courses should be under the control and management of the state medical association, with perhaps the Committee on Medical Education in active charge. The classes should be small, and matriculants required to pay fees which in the aggregate will meet the actual expenses incurred. If the plan is carried out along a highly ethical plane, and is made a distinctly educational feature instead of a means of exploiting men who are seeking to unduly profit by the

arrangement it should have the encouragement and support of the entire medical profession. At all events, it is worthy of serious consideration, which no doubt our Committee on Medical Education will give it at a very early date.

THE Bartholomew County Tuberculosis Association held its sixth free clinic on Sept. 29, 1920, in the basement of the Public Library at Columbus, Ind. Two specialists have been in attendance each time, Dr. Hatch of Sunnyside and Dr. Henry or Dr. Carter, of the State Sanatorium. Dr. G. L. MacCoy of Columbus is director of clinic and Miss Marguerite Bonar, R.N., is community nurse for the county. The basement of the library is admirably arranged and gives ample space for history, reception and examination rooms. The most up to date and attractive posters and literature are displayed and all ideas conducive to enlightenment in sanitation and hygiene are used. The clinic is conducted very much the same as the free clinic at the Indianapolis dispensary. Ninety-five patients have been examined at the seven clinics, many of these patients having come from outlying districts. The whole county is cooperating. Each patient is referred to his family physician, is followed up by the nurse and instructed in the rules of treatment which his particular case demands. Unusual interest has been shown by the laity throughout the county. The county medical society at the last meeting held in September unanimously recommended the work of the tuberculosis association. The townships, through their representatives, are assisting in developing the work out in the rural districts. A total of 318 visits has been made since the inauguration of the work in April.

DEATHS

JOHN C. NEWBY, M.D., Sheridan, died recently, aged 72 years. Dr. Newby was graduated from the Medical College of Indiana, Indianapolis, in 1880, and had practiced medicine for more than forty years.

WILLIAM HAROLD STUTSMAN, M.D., formerly of Hymera, died September 22 in Seattle, Wash., aged 34 years. He was graduated from Rush Medical College, Chicago, in 1915, and was a member of the Cook County Medical Society and the Illinois State Medical Association. Death was due to blood poisoning.

C. F. MITCHELL, M.D., formerly of South Bend, died at his home in Cleveland on September 25, aged 53 years. He was a member of the Cuyahoga County Medical Society, the Ohio State Medical Association and the American Medical Association. Dr. Mitchell was graduated from the Queen's University Faculty of Medicine, Kingston, in 1890.

WILLIAM H. SHORT, M.D., died October 16 at his home in LaGrange, aged 76 years. He was graduated from the University of Michigan Medical School, Ann Arbor, in 1869 and was a member of the LaGrange County Medical Society, the Indiana State Medical Association and the American Medical Association. Dr. Short had practiced medicine in LaGrange County for the past fifty years.

LEVI M. McCLAIN, M.D., died at his home in Scottsburg on October 2, aged 49 years. He was graduated from the Kentucky School of Medicine, Louisville, in 1894, and was a member of the Scott County Medical Society, the Indiana State Medical Association and the American Medical Association. Death was due to cerebral hemorrhage. Dr. McClain had been a practicing physician in the vicinity of Scott County for twenty-five years.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE Ohio Valley Medical Association met in Evansville, November 9 and 10.

DR. ARCHIE JONES has been practicing medicine in La Grange since October 1.

DR. W. O. GROSS, Fort Wayne, was operated on October 13 for appendicitis. His condition is encouraging.

CAPT. J. S. HICKMAN, Bluffton, has gone to Fort Benjamin Harrison to take up active army duty in the medical department there.

DR. CARL B. SPUTH, Indianapolis, has recently spent several weeks in Chicago attending clinics in eye, ear, nose and throat.

DR. WILBERT B. HINSDALE, Ann Arbor, for a quarter of a century dean of the Homeopathic School of the University of Michigan, has resigned.

THE Indiana Tuberculosis Association has announced the appointment of Murray A. Auerbach as executive secretary, succeeding E. Q. Laudemann.

DR. Z. M. BEAMAN, formerly of North Manchester and recently of Wabash, has returned to North Manchester for the continuance of his medical practice.

A CHILDREN'S hospital has been offered to Italy by the Committee on the American Tribute to Italy. It will be called the International Child Welfare at Rome.

AN all-time health officer is to be appointed in Laporte and a city laboratory is to be established, according to the report of the ordinance committee of Laporte.

DR. JAMES A. LOMAS, formerly of Fort Wayne, has been appointed government physician of the Blackfeet Indian reservation in northwestern Montana.

THE Florence Nightingale Medal has been awarded Miss. Margaret Clotilde Macdonald, matron-in-chief of the Canadian Expeditionary Forces during the World War.

THE American Red Cross Society announces the establishment of a department of health service and an extension of its nursing service. It now has 36,000 nurses working under its direction.

THE nurses at the City Hospital, Indianapolis, have recently received an increase in their weekly salaries. The new rate is \$8 for the first year, \$10 for the second year, and \$12 for the third year.

A JOINT convention of the eastern and western divisions of the Railway Surgeons' Association of the Pennsylvania Lines was held at the Claypool Hotel in Indianapolis, October 18, 19 and 20.

YELLOW fever is reported to be spreading in Mexico. According to latest word there are 100 cases in Vera Cruz and between thirty-five and fifty in Tampico. The disease has spread to other cities also.

THE Graduate School of Medicine of the University of Pennsylvania has established the first medical chair in bronchoscopy and esophagoscopy, the incumbent being Dr. Chevalier Jackson of Philadelphia.

THE Antituberculosis Society of Grand Rapids, Mich., has established a tuberculosis preventorium which will accommodate twenty-five patients. It was thrown open for inspection on September 9.

MISS M. B. ADAMSON, from the Mercy Hospital at Chicago, has taken charge of the Miller Hospital in Newcastle. The Miller Hospital is soon to be remodeled and its capacity increased to twenty-five beds.

THE physicians of Hendricks, Parke and Vermillion counties were the guests of Dr. Amos Carter, superintendent of the State Tuberculosis Sanitarium at Rockville, one day during the week of September 20.

DR. D. L. PHIPPS and Miss Lillian Tracy, both of Whiteland, were married September 21. They will live in Franklin where Dr. Phipps will be associated with Dr. L. L. Whitesides in the practice of medicine.

THE regular meeting of the Montgomery County Medical Society was held in Crawfordsville, October 13. An interesting feature in the scientific program was a paper read by Miss Meta Ludolph, public health nurse.

MISS JEANETTE TAYLOR has resigned as superintendent of the Hope-Methodist Hospital, Fort Wayne, after serving two years in that capacity. Temporarily Dr. Thomas F. Huffine is acting superintendent of the hospital.

At the meeting of the Western Surgical Association, to be held in Los Angeles on December 3, Dr. Arvine E. Mozingo, Indianapolis, is to read a paper and show two reels of motion pictures demonstrating his method of treatment for empyema.

THE Neuro-Psychiatric Association of Ontario, Canada, has been organized, and elected the following officers: president, Dr. Edward Ryan, Kingston; vice president, Dr. Harry Clare, Toronto; secretary-treasurer, Dr. C. Crawford, Whitby.

DR. G. C. JOHNSON, who has been temporarily in charge of Boehne Camp, Evansville, since the resignation of Dr. Thomas Willett in July, has accepted the position of superintendent for the coming year. He has employed Dr. J. H. Aud as resident assistant.

BIRTHS in Indiana in the state fiscal year, which ended September 30, reached the total of 43,954, a new record in Hoosier births. The total is 5,728 more than the last year's total and the death total was 28,122, or 1,854 more than the year before.

THE American College of Surgeons is to be the recipient of a gift from the British surgeons, according to word from London. The gift is intended as a remembrance of the work done in cooperation during the war, by British and American surgeons.

THE quarterly session of the State Board of Health was held in Wabash, October 4, 5 and 6. The members of the board made an inspection tour of the various town and rural schools and institutions. A great many unsanitary conditions throughout the community are to be remedied.

AN epidemic of eczema and similar skin diseases has been discovered in Germany as a result of use of substitutes for leather in the perspiration band in hats. Oil cloth and other similar products have been used since leather became so scarce, and the results have been distressing.

STATISTICS for the state of Indiana show that Fort Wayne, Huntington and Marion have the lowest infant mortality rates in the state. East Chicago, Mishawaka, Gary and Elwood have the highest infant mortality rates. Indianapolis has eighth place in the list of cities in infant mortality rates.

THE International Health Conference will hold its first series of regional health conferences on December 6-13 in Washington, D. C.

It will be devoted to the consideration of venereal diseases. The conference will be under the presidency of Prof. William H. Welch of Johns Hopkins University.

DR. ROYAL S. COPELAND, health commissioner, has asked for an appropriation of \$8,821,027.23 to run the New York City Department of Health for 1921, against \$4,857,951 for 1920. Of this amount \$7,551,978 is to be used in running the department and the difference is for new buildings.

A COMMISSION to investigate the outbreak of poliomyelitis in Massachusetts has been appointed at Harvard University, consisting of Dr. Milton J. Rosenau, professor of preventive medicine; Dr. Robert W. Lovett, professor of orthopedic surgery, and Dr. Francis W. Peabody, professor of medicine.

APPENDICITIS may now be treated by an anti-gangrenous serum instead of by operation, according to announcement by Prof. Pierre Delbet of the University of Paris. Professor Delbet is reported to have said that the tests have extended over a period of thirteen years and the results have been satisfactory.

THE Deaconess Hospital at Evansville is to have a new addition which will cost approximately \$200,000. The addition is to be a four-story brick structure of reinforced concrete and will be strictly fireproof. The new wing will be equipped with all modern appliances and will make the hospital one of the most modern in the state.

As a memorial to the late Major-General William C. Gorgas, former Surgeon-General of the United States Army, it has been proposed that an international institute for research in tropical diseases be established at Panama. It has been announced that the Panama government is willing to donate the St. Thomas Hospital for the use of the institute.

THE annual meeting of the Marion County Tuberculosis Association was held on October 26 at the Sunnyside Sanitarium, under the presidency of Dr. Alfred Henry. One of the most important features of the annual meeting was the reading of the report of the work accomplished by the Association in Indianapolis and Marion County throughout the past year.

THE National Academy of Sciences and the National Research Council have obtained a site for their new building at Washington, D. C. The site comprises a whole block facing the Lincoln Memorial in Potomac Park, and was purchased at a cost of about \$200,000. Funds for the erection of the building have been provided by the Carnegie Corporation of New York.

DURING October the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

The Seydel Manufacturing Co.: Betanaphthol Benzoate; Benzyl Alcohol; Mercury (Mercuric) Benzoate.

The Abbott Laboratories: Acriflavine and Proflavine.

AT the annual meeting of the American College of Surgeons, held at Montreal, October 11-15, under the presidency of Dr. George E. Armstrong, Montreal, the following officers were elected: president, Dr. John B. Deaver, Philadelphia, and vice presidents, Drs. Harvey G. Mudd, St. Louis, and Charles E. Sawyer, Marion, Ohio. The secretary and treasurer were reelected.

A PERMANENT International Society for the Prevention of Tuberculosis, composed of all nations signatory to the League of Nations covenant and the United States, was formed on October 26 by the International Antituberculosis Conference in session in Paris. Sir Robert William Philip, M.D., of Edinburgh, was elected president of the International Society and London was selected for the first annual meeting next autumn.

YOUNG men are needed in the Hospital Corps of the Navy, according to announcement in the weekly bulletin of the Department of Health of the city of New York, and a splendid opportunity is offered for young men to get extensive education and experience in this kind of work. Applicants must pass a satisfactory physical examination and have at least a common school education. High school training is desired but not required.

THE Annual Roll Call of the American Red Cross Society is set for the two weeks from November 11 to 25. There are in this country 90,000,000 people who did not join last year. It is these 90,000,000 that the Red Cross wants. It is not easy to interest a healthy man in health.

but physicians and nurses are an exception to this rule. It is the duty and the privilege of every one connected with either the medical or the nursing profession to give the Red Cross his or her aid.

THERE has been a decided increase in the cost of publication of medical journals in England as well as America. The *British Medical Journal*, for instance, has an estimated deficit of \$17,000 for the year 1920. The subscription price of the *British Medical Journal* prior to 1903 was 21 shillings. In 1903 it was increased to 25 shillings, in 1913 to £2 and 2 shillings and it is to be increased 50 per cent. This increase will not probably effect American subscribers as the rate for the year 1919-1920 was \$15.

A PARTY of American scientists, headed by Dr. H. H. Rusby, dean of the College of Pharmacy, will go to South America early next year for the purpose of studying medicinal plants, insects and animals, with the hope that discoveries of economic and scientific value may be made. About 1,000 miles of the Amazon Basin in Eastern Ecuador and Peru will be explored. The expedition is to be financed by the H. K. Mulford Company of Philadelphia and is called the Mulford Biological Exploration of the Amazon.

AT the twenty-fifth annual meeting of the American Academy of Ophthalmology and Otolaryngology, held at Kansas City, Oct. 15, 1920, the following officers were elected for the ensuing year: President, Dr. Emil Mayer, New York; vice presidents, Drs. John R. Newcomb, Indianapolis; Robert Ridpath, Philadelphia, and W. C. Finnoff, Denver; treasurer, Dr. Secord H. Large, Cleveland; secretary, Dr. Luther C. Peter, Philadelphia, and editor, Dr. Clarence Loeb, Chicago. The next meeting will be held in Philadelphia.

AT the annual convention of the Indiana State Nurses' Association, held October 8 at the Hotel Severin, Indianapolis, the following officers were elected: Miss Mary A. Meyers, Indianapolis, president; Miss Gertrude Barber, Fort Wayne, first vice president; Miss Louise Hiatt, second vice president; Mrs. C. D. Fansier, Indianapolis, secretary; Miss Anna Sims, treasurer. Directors were elected as follows: Miss Louise Nichol, Fort Wayne; Miss Frances Ott, Morocco; Miss Delia Glen, Gary; Miss Edith Willis, Vincennes; Miss Mary Favorite, Indianapolis; Miss Grace Morehouse, Lafayette.

"WHAT EVERYONE SHOULD KNOW ABOUT CANCER," is a new handbook published by the American Society for the Control of Cancer and is intended for the laymen who have no technical knowledge and who, therefore, wish to learn what they can, expressed in the simplest language. This 30 page handbook can be procured from the American Society for the Control of Cancer, 25 West Forty-Fifth Street, New York City, at the following rates: 5,000 copies, \$175; 1,000 copies, \$50; 500 copies, \$25; 100 copies, \$5. Orders for fifty copies or less for personal distribution will be furnished free of cost by the Society.

THE United States Civil Service Commission announces an open competitive examination for anatomist in the office of the Surgeon-General, Army Medical Museum, Washington, D. C., at \$1,600 a year, plus increase granted by Congress of \$20 a month. All citizens of the United States, both men and women, may enter this examination. The duties of the appointee will consist in the preparing of gross and histologic material and the making of drawings, etc., for illustrative purposes. Applicants must have graduated from a four years' high-school course, have had one year's academic training and have attended a course in art subjects, including the illustration of anatomic material. Applicants should at once apply for Form 1312, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C.

THE one hundred and sixth semi-annual meeting of the Union District Medical Association was held Thursday, October 28, at Rushville, under the presidency of J. N. Study. The following scientific program was carried out: "The Union District Medical Association and Some Things in Medicine Occurring in a Half Century," by J. N. Study, Cambridge City; "Diagnosis of Tuberculosis," by Stephen C. Markley, Richmond, discussion by A. C. Kimberlin, Indianapolis, and Thomas J. Beasley, Indianapolis; "Lantern Slide Demonstration of Heart Irregularities and Their Clinical Significance," by J. E. Greiwe, Cincinnati, discussion by Charles P. Emerson, Indianapolis, and Charles S. Bond, Richmond; "Lethargic Encephalitics," by C. F. Neu, Indianapolis, discussion by H. A. Hoppe, Cincinnati, and Harvey Cook, Oxford, Ohio; "The Present Status of Tonsil and Adenoid Surgery," by John F. Barnhill, Indianapolis, discussion by Frank Green, Rushville, and E. H. Smith, Newcastle.

THE forty-seventh annual meeting of the Northern Tri-State Medical Association was held at the Anthony Hotel, Fort Wayne, on October 26. The following scientific program was carried out: "Early Diagnosis of Joint Lesions," by Frederick C. Kidner, Detroit; "Surgery of Central Nervous System: Fundamental Principles," by Homer H. Heath, Toledo; "Clinical Study of One Hundred Eighty-Six Cases of Primary Anemia with a Special Reference to the Involvement of the Central Nervous System," by W. H. Riley, Battle Creek; "Radium Therapy," by Grace Line Homman, Laporte; "Anesthesia," by C. C. McLean, Dayton; "The Problem of Gastrop-tosis," by Willard C. Stoner, Cleveland; "The Preservation and Reconstruction of the Pelvic Floor from an Obstetric Standpoint," by F. R. Clapp, South Bend; "Foreign Bodies in the Esophagus and Bronchus," by Chares F. Bowen, Columbus; "Some Aspects of the Failing Heart," by Arthur R. Elliott, Chicago.

CORRESPONDENCE

MEDICAL HUMBUG

ATTICA, IND., Oct. 25, 1920.

To the Editor:

In an editorial in the October number of THE JOURNAL you advocate more activity on the part of physicians in advising the public of the weakness and danger in various new schools and cults in medicine. You are quite right. The attitude too long has been one of indifference on the part of the profession, on the false assumption that it will correct itself when the public gets a stinging and learn their status. Have these bland members of the legitimate school not observed that one fad or irregular pest is no sooner relegated to oblivion than it is followed by others equally mischievous? It is our business to correct this nonsense and fraud, and to protect the public and ourselves as well.

My conviction is that every person coming up for the practice of medicine should take a real examination in at least these four fundamentals: anatomy, physiology, pathology and physical diagnosis. Let this examination be the same for regulars and all comers, then if the applicant indicates his intentions to practice optometry, physiotherapy (osteopathy, chiropractic or what not) or other specialty, he will receive further examination on these subjects the same as regulars in surgery, pediatrics, etc. By all means should this apply to all schools using any

physical agencies whatsoever and it should come under one board. The absurdity of expanding boards to include a representative for every new cult is apparent to reasonable men. Whether we can include in this arrangement various faith cures, such as Christian Science, is a question. These latter at least should take a stiff examination on our state health laws and hygiene before being permitted to assume responsibility of caring for the sick. These requirements will meet the oft repeated objections of the average pin head legislator who harps about limiting medicine to one school of practice. The legitimate physicians we are turning out today are superior to the men of earlier days and they are not locating in our small country towns where men are already being badly needed.

If something corrective of present tendencies is not done soon the country is going to experience a dearth of doctors, particularly in country districts. About one month ago I offered our press here, under an assumed name, the article below. A notorious faith quack (until recently a chauffeur) left within one week and has not since appeared. He had been good for around \$100 per day. I cannot vouch for the certainty of my bit of publicity balking his plans.

LOUIS A. BOLLING, M.D.

MOB GULLIBILITY

Human beings resemble their animal friends in very many respects, but in none so much as in their tendency to follow a few over-anxious, credulous leaders and drop into a well planned snare. Advertising, in a measure, is based on this recognized law of psychology, as also is salesmanship in general. Even the evangelist takes advantage of this peculiar human weakness to be led by example and mass emotion. The street faker's stock in trade is dependent almost wholly on (1) the slight bid of attraction required to hold a crowd, and (2) the ease with which he may control their thinking. Mass gullibility in its purest form. So, too, the patent medicine vender succeeds or fails not by reason of any inherent value in his wares but on the extent to which he applies these little principles of psychology to the gullible masses. Most of us in early business life are plain suckers, but a few nice wallops on our checking account throws the rub lock on and a degree of caution may persist through life. Others, again, forget or grow indifferent when something comes along in new form and wears the cloak of innocence.

Most people remain comparatively poor through life by falling for every innovation, often before the thing is well tried out or perfected. We do these things because our neighbors and friends are getting in—mob gullibility. The stock salesman is a past master at wielding this handy little cudgel. He gets a few leaders, often by means of a tidy little block of stock gratis. Then when he makes the rounds almost his first appeal is to your bump of imitation by running down a long list of your eminent friends. Of course you will get in. Everybody wants it and the company

does not want to leave you out. By no means is it always ignorance at the bottom of this frailty in our character. Some people throughout their whole lives are so hopelessly credulous and confiding that they are easy marks for shrewd practices.

Perhaps the most glaring instances of the public's kindly reception of fraud and deceit are furnished by the present day throng of mushroom doctors; farmhands and seamstresses today, and full-fledged doctors tomorrow. As the laws are administered today there is no liability attached to anyone who has impulse and nerve to tackle it, from posing before the suffering public as a divine healer, a doctor, or an adjuster of your several parts. So far as getting the money is concerned it would seem to make little difference whether they touch, rub, squeeze, beat or break you. Furthermore, so far as getting results is concerned it seems a matter of the slightest importance what grotesque form is adopted. One of these disciples-of-healing will pray with you, to you, or for you, present or absent. Another will give you an exact diagnosis of your ailment only by glancing into your gazelle-like eyes, and, presto, remove the distressing symptoms in almost as magical a manner by some slight maneuver which the subject never tires of reciting to her friends; although previous to this her husband has been getting most of his own meals. Is all of Attica aware that she has been blessed with one of these instantaneous performers recently? Oh yes, of course we have for long had healers who did marvelous things, but not till now, one of these regular fellows who mend your infirmities while you wait, just like Benny Katz does your shoes. Anyhow, this fellow gets tired being a chauffeur, and one day he beat it from the town where everybody knew him and commenced to see people at so much per sight. Oh, boy! talk about easy money. This bird has Ponzi down in Boston beat seven ways, because after this latter shrewd rat had taken about \$5,000,000 easy money on a gigantic performance of mob gullibility, they turn in and clap him in jail. Now that's where this guy in Attica shines, because even if one of the regular Docs would squeal and have him pinched for practicing medicine without a license there would be a mob of dear people there to cry persecution and openly in court extol his virtues and ability to heal. Funny old world, isn't it? We would laugh to catch a plumber trying to mend a balky watch, but anybody will do to diagnose your physical infirmities and correct them.

L. B.

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County	Secretary	Date
1.	Decatur,	C. R. Bird.....	Feb. 1, 1920
2.	Fayette,	R. H. Elliott.....	Feb. 1, 1920
3.	Franklin,	E. M. Glaser.....	Feb. 1, 1920
4.	Fulton,	A. E. Stinson.....	Feb. 1, 1920
5.	Jasper-Newton,	O. E. Glick.....	Feb. 1, 1920
6.	Jefferson,	O. A. Turner.....	Feb. 1, 1920
7.	Marshall,	Harry Knott.....	Feb. 1, 1920
8.	Posey,	John Raney.....	Feb. 1, 1920
9.	Shelby,	F. E. Bass.....	Feb. 1, 1920

10.	Sullivan,	J. B. Maple.....	Feb. 1, 1920
11.	Union,	J. D. Shonwald.....	Feb. 1, 1920
12.	Warrick,	J. F. Samples.....	Feb. 1, 1920
13.	Washington,	Claude B. Paynter.....	Feb. 1, 1920
14.	Wells,	G. B. Morris.....	Feb. 1, 1920
15.	Whitley,	H. M. Ego.....	Feb. 1, 1920
16.	Delaware-Blackford,	H. D. Fair.....	March 1, 1920
17.	Hancock,	C. H. Bruner.....	March 1, 1920
18.	Knox,	D. H. Richards.....	March 1, 1920
19.	Madison,	Doris Meister.....	March 1, 1920
20.	Monroe,	J. E. P. Holland.....	March 1, 1920
21.	Scott,	J. P. Wilson.....	March 1, 1920
22.	White,	H. B. Gable.....	March 1, 1920
23.	Marion,	Leslie H. Maxwell.....	April 1, 1920
24.	St. Joseph,	R. B. Dugdale.....	April 1, 1920
25.	LaGrange,	A. J. Hostetler.....	April 1, 1920
26.	Miami,	M. L. Wagner.....	April 1, 1920
27.	Steuben,	Mary Ritter.....	April 1, 1920
28.	Tippecanoe,	W. M. Reser.....	April 1, 1920
29.	Wabash,	L. O. Sholtz.....	April 1, 1920
30.	Fountain-Warren,	A. M. Sullivan.....	May 1, 1920
31.	Henry,	W. H. Stafford.....	May 1, 1920
32.	Jay,	C. A. Paddock.....	May 1, 1920
33.	Montgomery,	A. L. Loop.....	May 1, 1920
34.	Vanderburgh,	William E. Barnes.....	May 1, 1920
35.	Bartholomew,	H. H. Kamman.....	June 1, 1920
36.	Dearborn-Ohio,	E. J. Libbert.....	June 1, 1920
37.	Huntington,	F. B. Morgan.....	June 1, 1920
38.	Vigo,	W. D. Asbury.....	June 1, 1920
39.	Clarke,	.....	July 1, 1920
40.	Clinton	.....	July 1, 1920
41.	Kosciusko	.....	Sept. 1, 1920
42.	Lake County,	E. E. Evans.....	Oct. 1, 1920
43.	Noble County,	H. O. Williams.....	Oct. 1, 1920

HENDRICKS COUNTY

The regular meeting of the Hendricks County Medical Society was held in the auditorium of the Court House, October 22, with a good attendance of members.

Dr. J. C. Stafford of Plainfield was elected president; Dr. J. D. Hendricks of Lizton, vice president, and Dr. W. T. Lawson of Danville, secretary-treasurer.

On invitation of the society Dr. William H. Foreman of Indianapolis was present and addressed the society on "Signs and Symptoms of Abdominal Conditions Producing Pain. The Doctor's outline of the nervous supply of these internal organs was very interesting and instructive.

Dr. Lawson presented a clinical case: that of a man aged 51, with congenital dislocation of the heart. The organ was found located in the right chest cavity, somewhat dilated and with a double cardiac murmur of specific origin. The case was examined and discussed by the society as of rare occurrence and of deep interest, some having never seen a similar case.

Dr. Scamahorn of Pittsboro was chosen to represent the society in the House of Delegates at the next session of the Indiana State Medical Society. The society adjourned to meet on the fourth Friday of January.

THOMAS R. BARKER, President.
WILSON T. LAWSON, Secretary.

TIPPECANOE COUNTY

The regular annual business meeting of the Tippecanoe County Medical Society was held at the Hotel Lahr, Lafayette, on September 28, following a 6 o'clock luncheon. Dr. Bauer, health officer, offered criticisms of birth certificates and death reports. State delegate, Dr. Crockett, on request reported the South Bend

meeting, stating that the Councilor District (the Ninth) has been changed to include Benton County. One of the chief subjects discussed was "How to Eradicate So-Called Illegal Practitioners, Such as Chiropractors." The annual registration fee was discussed but not adopted. Dr. Stern was appointed chairman of hospital standardization. He recommended postgraduate courses or medical Chautauquas held over the state. Dr. David Ross was elected president, and Indianapolis was selected as the next meeting place. Dr. Moffitt also gave a report of the South Bend session and Dr. Keiper added a few remarks Under new business Dr. Moffitt announced that the next Ninth District Meeting is to be held in Lafayette in May, 1921, and that now is the time to begin preparations. Dr. Kern reported progress on the question of tuberculosis hospital. Adjourned. There were twenty-three members present and one visitor.

After a luncheon at Hotel Lahr at 6 p. m., Oct. 26, 1920, President Pike called the regular meeting of the Tippecanoe County Medical Society to order. The previous meeting's minutes were read and approved.

Order of business was suspended and the paper of the evening on, "Intestinal Diverticuli and Their Surgical Significance," was presented by Dr. W. H. Williams of Lebanon.

Synopsis: Every abdomen opened should be inspected for diverticuli: about 2 per cent. of human bodies have them. Diverticuli are congenital and acquired; the former usually single, the latter multiple. A diverticulosis usually gives no symptoms but a diverticulitis always produces manifestations. Most of the acquired are found in the colon, the sigmoid section being the most common location. A few are found in other sections of bowel; acquired more in males than in females; in 130 reported cases, 100 were in males and 30 in females. The congenital have all four coats of intestinal wall, while in the acquired the wall is usually limited to the mucosa, submucosa and peritoneal layers; being really intestinal hernia that usually break through where blood vessels penetrate the wall. These are usually found in the middle aged or older, in nervous emotional persons; this class of people being prone to intestinal fermentation with resulting colitis.

The most common congenital is Meckels; situated lower part of ileum; being a rudimentary remnant of stern of yolk sack. Varies in structure from a fibrous elongated band to a blind pouch. Both varieties have different shapes which may be classified under six heads: (1) Mere patulous fiber; (2) nonpatulous band; (3) glove-finger form; (4) globular; (5) collar-button shape; (6) sacculated bulging with no neck. All patulous forms are a regular haven for foreign bodies, subject to acute attacks followed by sloughing. The globular and collar-button forms prone to suppurate; the slender fibrous to produce obstruction; the glove-finger form most dangerous as to intussusception.

Symptoms.—Congenital, same as acute inflammations of other abdominal organs. Acquired, more the symptoms of chronicity, as intestinal stasis, flatulency, intestinal fermentation, mucous stools, and similar manifestations.

Diagnosis.—Never positive until abdomen opened. Roentgen ray may help. Even intra-abdominal inspection may fail without careful dissection. Patulous types with free opening cannot be determined at all until abdomen is opened.

Treatment.—Always surgical, same as appendectomy and bowel suturing. The sacculated form by inversion and suturing.

Case Reports.—Case 1.—September, 1912. Female, single, 27 years. Temperature, 99.2; respiration, 21; pulse, 100; anemic, tenderness lower right abdominal quadrant. Opened abdomen, found uterus retroverted, appendix normal, a collar-button shaped Meckels diverticulum. Retroversion corrected, appendix and diverticulum removed. Uneventful recovery and distressing symptoms ceased with no return.

Case 2.—In 1913. Female, single, 37 years. Temperature, 98; pulse, 100; respiration, 24. History of tonsillitis and rheumatism followed by heart lesions. Pelvic pain since age 30. Catarrhal symptoms of abdomen were all present. Pain in right side radiating to gallbladder region. Tenderness over right lower quadrant. Operated even though heart in precarious condition. Multiple tumors of pelvis removed; also a Meckles diverticulum. Heart action alarming. Died.

Case 3.—Boy, 17 years. Temperature, 100; pulse, 98; respiration, 20. Pain in side corresponding in location to McBurney's point on right. Operated; incised mass, pus flowed freely followed by fecal matter. Diagnosed as left sided appendicitis. Later while in army service had a typically inflamed appendix removed from normal location. The diagnosis of left sided appendicitis now changed to suppurative diverticulitis.

Many of the abdominal problems that present themselves may be more readily solved if we always keep in mind the possibility of diverticuli.

Discussion.—Dr. Ruschli: Case 1.—Temperature normal, tenderness lower right abdominal quadrant, intestinal toxemia. Had been diagnosed appendicitis. Operated. Found acquired diverticulum producing obstruction. Treated same as adhesions.

Case 2.—Saw in consultation. Child, enterocolitis, extreme tenderness, constant agony, rigidity all over abdomen, finally centralized on lower left side. Operated. Found pus a plenty. Extensive exploration not advisable. Provisionally diagnosed as infected diverticulum.

Dr. Shafer: Meckels involves lower part of ileum. Acquired mainly in sigmoid, in adult life. No positive way to diagnose Meckels from appendicitis, but probably pain referred more towards umbilicus. Acquired more frequent in fat people and depends somewhat on occupation, as those who undergo severe muscular strain.

Case 1.—Infant one month old. Umbilicus discharging. Operated. Found diverticulum about 4 inches long, similar to an appendix. Treated same as an appendix. So few cases seen that no one individual can report many cases.

Dr. Pyke: Case 1.—Intestinal obstruction. Operated. Found thick fibrous band. This was severed. Made uneventful recovery. Probably a nonpatulous fibrous diverticulum.

Case 2.—Had three attacks: pain left lower quadrant, vomiting, no temperature, tenderness. All the symptoms of left sided appendicitis. Appendix had been previously removed. Roentgen-ray examination was negative, but had all clinical symptoms of acquired diverticulitis. No operation secured.

Eighty-five per cent. of acquired are in sigmoid. Diverticulitis symptoms those of appendicitis, may proceed by ulceration to fistula into other organs, as the bladder; or pass through the stages of congestion,

infiltration, producing obstruction or eventually to carcinoma. Probably many so-called carcinoma of sigmoid are but acquired diverticuli producing obstruction.

Dr. Rhomberger: Should normal diverticuli accidentally discovered while operating be removed? Dr. Williams: Remove it would be good surgery.

Dr. Shafer: What is most frequent cause of acquired type? Dr. Williams: Probably condition of patient, as advancing age and nervous make up.

Unanimous rising vote of thanks extended to Dr. Williams.

Dr. Kern announced that the entire State Board of Health would be in Lafayette, November 16 and 17. On motion of Dr. Keiper the society voted to hold the November meeting one week earlier (November 16) and invite the State Board of Health to be our guests to luncheon on that occasion.

Local health officer, Dr. Bauer, stated there were too many infant deaths from ileocolitis and that he believed that milk offered for sale should be udder milk and not reconstructed milk unless it was so specified by label. This elicited a lengthy discussion, consensus of opinion expressed was that we had no market at which good reliable milk could be obtained; that some minimum standard be adopted and rigidly enforced. It was decided to devote one meeting in the near future to the milk question and invite Professor George of Purdue and also to ask for a representative of the State Dairyman's Association to meet with us. A committee was appointed to arrange for the meeting and conduct an investigation of the milk situation. Dr. Frank Hunter reported that the bacterial count in the local milk supply was too high.

The old legal committee, which has been hibernating for several years, was resuscitated and ordered to investigate some reports in which certain pretended healers were fleecing the unsuspecting public, and if necessary to enter legal proceedings against the offenders found.

President Pyke announced the following heads of committees for the May district meeting: Toasts, Dr. Keiper; Banquet, Dr. Reser; Ladies, Dr. Adah McMahan.

Adjourned. Members present, twenty-one; visitors, five.

WILLIAM M. RESER, Secretary.

THE TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

Since publication of New and Nonofficial Remedies, 1920, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

ICHTHYNAT.—An aqueous solution, the important medicinal constituents of which are ammonium compounds containing sulphur in the form of sulphonates, sulphones and sulphides. These characteristic forms of sulphur result from the sulphonation of the tarlike distillate obtained from certain bituminous shales. For the actions and uses of ichthynat see the general article on Sulphoichthyolate Preparations and Substitutes, New and Nonofficial Remedies, 1920, page 318. The Heyden Chemical Works, New York City (*Jour. A. M. A.*, Oct. 2, 1920, page 939).

PROGANOL.—A compound of silver and albumose, containing not less than 8.3 per cent. of silver in organic combination. For the actions and uses of proganol, see general article on silver preparations, New and Nonofficial Remedies, 1920, page 306. From 0.25 to 1 per cent. solutions are used in acute gonorrhea, and 5 to 10 per cent. instillations in chronic cases. In cystitis and urethritis from 1:1,000 to 1:2,000 solutions are used as irrigations. Used also in forms of bougies and tampons (5 to 10 per cent.).

TWENTY PER CENT. AROMATIZED SUSPENSION MADE FROM BENZYL BENZOATE VAN DYK AND CO.—A mixture, each 100 Cc. containing benzyl benzoate for therapeutic use (Van Dyk and Co.), 20.32 Gm.; acacia, 8.0 Gm.; olive oil, 5.00 Gm.; sugar, 12.00 Gm.; flavors and water, to make 100 Cc. For actions and uses of benzyl benzoate, see New and Nonofficial Remedies, 1920, page 49. United Synthetic Chemical Corporation, New York (*Jour. A. M. A.*, Oct. 16, 1920, page 1069).

ACRIFLAVINE-ABBOTT.—A brand of acriflavine (see New and Nonofficial Remedies, 1920, page 20) complying with the N. N. R. standards. The Abbott Laboratories, Chicago.

PROFLAVINE-ABBOTT.—A brand of proflavine (see New and Nonofficial Remedies, 1920, page 21) complying with the N. N. R. standards. The Abbott Laboratories, Chicago.

BETANAPHTHOL BENZOATE-SEYDEL.—A brand of betanaphthyl benzoate (see New and Nonofficial Remedies, 1920, page 189) complying with the N. N. R. standards. Seydel Manufacturing Co., Jersey City, N. J.

BENZYL ALCOHOL-SEYDEL.—A brand of benzyl alcohol (see New and Nonofficial Remedies, 1920, page 27) complying with the N. N. R. standards. Seydel Manufacturing Co., Jersey City, N. J. (*Jour. A. M. A.*, Oct. 30, 1920, page 1205).

PROPAGANDA FOR REFORM

MORE MISBRANDED VENEREAL NOSTRUMS.—The following preparations have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act, on the ground that the therapeutic claims made for them were false and fraudulent: Injection Malydor (The Williams Mfg. Co., Cleveland, Ohio), essentially a dilute watery solution of boric acid, phenol, a zinc salt, glycerin, acetanilid and unidentified plant material. G Zit (The Stearns Hollinshead Co., Inc., Portland, Oregon), bougies consisting essentially of cacao butter and a silver compound. G Zit Antiseptics (The Stearns Hollinshead Co., Portland, Oregon), composed essentially of oils of copaiba and cubebs, and a compound of sulphur. Hinkle Capsules (Hinkle Capsule Co., Mayfield, Ky.), consisting essentially of powdered cubebs, copaiba and cannabis indica. Tisit-Pearls (S. Pfeiffer Mfg. Co., East St. Louis, Ill.), consisting essentially of a mixture of oil of sandalwood, balsam of copaiba, oil of cinnamon and a fixed oil. Tisit (S. Pfeiffer Mfg. Co., East St. Louis, Ill.), a watery solution of zinc sulphate thymol, alum and glycerin. Black-Caps (Safety Remedy Co., Canton, Ohio), consisting essentially of copaiba, cubebs and saw palmetto. Hexagon (Montebello Laboratories, Kansas City), an injection consisting essentially of a watery solution of zinc sulphocarbolate, boroglyceride and bismuth subnitrate and capsules containing hexamethylenamin. Hyatt's A. B. Balsam (C. N. Crittendon Co., New York City), consisting essentially of potassium iodid, alum, Epsom salt, plant extractives and unidentified alkaloids, sugar, glycerin and alcohol. DuQuoin's Compound Santal Pearls (Wm. R. Warner and Co., Inc., New York City), consisting essentially of a mixture of santal oil and copaiba (*Jour. A. M. A.*, Oct. 2, 1920, page 954).

MORE MISBRANDED VENEREAL NOSTRUMS.—The following preparations have been the subject of prosecution by the federal authorities under the Food and Drugs Act, chiefly because the therapeutic claims made for them were false and fraudulent. Injection Zip (The Baker-Levy Chemical Co.), consisting essentially of acetates and sulphates of zinc and lead, opium, berberin, plant extractives, alcohol and water. Three Days Cure ("3 Days" Cure Co.), consisting essentially of zinc sulphate, boric acid and water. Redsules (H. Planten and Son), consisting essentially of oil of santal, copaiba and methyl salicylate. Blakes Capsules (Henry K. Wampole and Co.), consisting essentially of a tablet of salol suspended in a mixture of volatile oils, oleoresins and plant extractives, including copaiba and cubebs. Compound Extract of Cubebs with Copaiba (The Tarrant Co.), consisting essentially of cubebs, copaiba and magnesium oxid. Santal Midy Capsules (E. Fougere and C.), containing essentially oil of santal (*Jour. A. M. A.*, Oct. 9, 1920, page 1016).

THE BETHLEHEM LABORATORIES EXPLAIN.—The president of the General Laboratories, who is also vice president of the Bethlehem Laboratories, explains that the Bethlehem Laboratories is the sales and distribution organization for hyclorite, which is manufactured by the General Laboratories, and that the offer from the Bethlehem Laboratories to sell to physicians shares in the company was the unauthorized act of an authorized agent. The General Laboratories and the Bethlehem Laboratories recognize the impropriety of soliciting physicians to purchase stock in their concern (*Jour. A. M. A.*, Oct. 9, 1920, page 1016).

SUCCUS CINERARIA MARITIMA.—The medical profession is at present receiving through the mail circulars extolling this nostrum for its alleged virtue in "absorbing" various forms of cataract. In February, 1917, the Bureau of Chemistry of the U. S. Department of Agriculture issued a Notice of Judgment which showed that the government authorities had prosecuted the firm which markets the preparation—The Walker Pharmacal Company—because claims were made on the trade package to the effect that this nostrum was a remedy for cataract and other opacities of the eye. The authorities charged that these claims were false and fraudulent. To this charge the company pleaded guilty, but these claims are still being made through other avenues to the medical profession (*Jour. A. M. A.*, Oct. 9, 1920, page 1007).

THE USE OF ARSPHENAMINE AND RELATED COMPOUNDS.—Many therapeutic perplexities remain after nearly a decade of trial of the type of compound which Ehrlich introduced. It is well for the practitioner to realize this, especially when expert workers still make an appeal for conservative interpretation. Arspenamine has apparently made it possible or even probable, but only to the inexperienced has the cure of syphilis been made absolute and inevitable. Even the composition of arspenamine and neo-arsphenamine is not fully known, and the control of the products by the government is important. It should be borne in mind also that neo-arsphenamine behaves differently in the animal organism from arspenamine, and should not be regarded simply as arspenamine in a convenient form for administration. The various brands of arspenamine and neo-arsphenamine made in the United States compare favorably as to toxicity with those made abroad (*Jour. A. M. A.*, Oct. 9, 1920, page 1005).

BRAN-O-LAX TABLETS.—The public is urged to purchase these "Laxative Wheat-Bran Tablets for constipation and indigestion instead of those severe and harmful drugs." The essential claims, either inferred or expressed, are to the effect that Bran-O-Lax Tablets are wheat bran in condensed form and that they

are free from "harmful drugs." It is also claimed that "Bran-O-Lax contains one heaping tablespoonful of plain nutritious wheat bran condensed into tablet form." The A. M. A. Chemical Laboratory reports that Bran-O-Lax Tablets contain wheat bran, reducing sugar (probably glucose) in large amounts, a gummy substance, probably acacia, and about one grain of phenolphthalein per tablet. Whereas a heaping tablespoonful of wheat bran was found to weigh about 166 grains, the total weight of a Bran-O-Lax Tablet was only about 35½ grains (*Jour. A. M. A.*, Oct. 16, 1920, page 1083).

TOXICITY OF ARSPHENAMINE.—Roth has determined that if an alkalized solution of arspenamine or a solution of neo-arsphenamine is shaken in the presence of air for one minute, the toxicity is increased. He points out that arspenamine preparations which are soluble with difficulty are likely to be shaken to aid in the solution of the drug with the risk that chemical reaction may occur (*Jour. A. M. A.*, Oct. 16, 1920, page 1072).

CHAULMOOGRA OIL IN LEPROSY.—Continued trials made at the leprosy investigation station of the U. S. Public Health Service and the Kalihi Hospital at Hawaii seem to justify more than ever the statement that chaulmoogra oil contains one or more agents that exert a marked therapeutic action in many cases of leprosy. The intramuscular injection of the soluble ethyl esters of the fatty acids from chaulmoogra oil usually leads to a rapid improvement in the clinical symptoms of leprosy. The ethyl esters of iodine addition compounds of the unsaturated fatty acids in chaulmoogra oil have also been used. There is no experimental proof that this addition of iodine causes any increase in the effectiveness of the material used (*Jour. A. M. A.*, Oct. 16, 1920, page 1071).

FAKE ORANGE BEVERAGES.—The Orange and other citrus fruits possess value other than that which can be measured by flavor or fuel value. They are relied on as antiscorbutic by a large number of persons in the preparation of food mixtures which for some reason are deficient in this protective element. Oranges merit additional favor because they are relatively rich in the water-soluble vitamin B, sometimes designated antineuritic vitamin, which promotes well-being in as yet an undetermined way. In view of these facts, the chemists of the U. S. Public Health Service have done well in their timely warning against the "fake" orange beverages that have come to their attention. They report that in most cases the fraudulent products consisted of carbonated water, flavored with a little oil from the peel of the orange and artificially colored to imitate orange juice (*Jour. A. M. A.*, Oct. 16, 1920, page 1073).

VACCINES IN TOXIC CONDITIONS.—Under this title an article purporting to be a scientific contribution appears in the original department of the *Illinois Medical Journal*. The apparent purpose of the article is to overcome any hesitancy on the part of practitioners to use vaccines in toxic infectious conditions for fear that they might thereby cause harm. The theory propounded is contrary to those who have studied the subject. The man who writes the article, G. H. Sherman, is in the business of making and selling vaccines, though this is not made evident in the article (*Jour. A. M. A.*, Oct. 23, 1920, page 1140).

MORE MISBRANDED PRODUCTS.—The following products have been the subject of prosecution by the federal authorities: Salubrin (Salubrin Laboratories, Grand Crossing, Chicago) was held to be misbranded because the therapeutic claims made for it were false and fraudulent. Dolomol-Calomel and Dolomol Iodoform (Pulvola Chemical Co., Jersey City, N. J.) were held to be adulterated and misbranded because they did not have the composition claimed. Influenza

Special (Senoret) (Senoret Chemical Co., St. Louis) was misbranded because the therapeutic claims made for it were false and fraudulent. Gray's Ointment (Dr. W. F. Gray and Co., Nashville, Tenn.) was misbranded because the therapeutic claims were false and fraudulent. Vegetable Blood Purifier (Gibson-Howell Co., Jersey City, N. J.) was held misbranded on the ground that the therapeutic claims were false and fraudulent. Renovine (Van Vleet-Mansfield Drug Co., Memphis, Tenn.) was held to be misbranded because the therapeutic claims were false and fraudulent. Cin-Ko-Na and Iron (De Lacy Chemical Co., St. Louis) was declared misbranded because the curative claims were false and fraudulent. Craig Healing Spring Mineral Water (Craig Healing Springs Hotel, New Castle, Va.) was held to be misbranded because the therapeutic claims were false and fraudulent. Laxa-Cura Water Co.) was held to be adulterated and misbranded because it consisted in part of a filthy and decomposed putrid animal and vegetable substance, and because the alleged analysis was incorrect and because the curative claims were false. Reuter's Little Pills for the Liver (Barclay and Co., New York) were held misbranded because the curative claims were false and fraudulent (*Jour. A. M. A.*, Oct. 23, 1920, page 1150).

TANNIN COMPOUNDS USED AS INTESTINAL ASTRINGENTS.—On account of the irritant action of tannic acid on the stomach, a number of tannic acid compounds have been introduced which are assumed to pass the stomach practically unchanged but are broken up in the intestines with liberation of the tannic acid. Working in the A. M. A. Chemical Laboratory, P. N. Leech has made a study of the tannin compounds described in New and Nonofficial Remedies, and also of some recently introduced American products, to determine whether they are largely unchanged by action of gastric juice, and if so, whether they are capable of decomposition by the intestinal juice. For this purpose he determined the solubility of each compound in water and hydrochloric acid solution, acid and pepsin solution, and sodium bicarbonate and pancreatic extract solution. Only one type of tannic acid compound studied completely resists the action of the gastric juice and is broken down in the intestine according to theory, i. e., the diacetyl tannin acid compound acetannin. Tannigen is fairly satisfactory, but the market supply is not of reliable composition. Protan and tannoform are both readily soluble in sodium bicarbonate mediums, but they are probably not broken up to a great extent in the intestine. Of the tannin albuminates, Albutannin-Calco and Albutannin-M.C.W. are not nearly so resistant to the acid-pepsin digestion as tannalbin and tannin albuminate exsiccated. Both tannalbin and tannin albuminate exsiccated (the latter now sold as Albutannin-Merck) are not particularly resistant to the acid-pepsin medium, but they do liberate free tannic acid in the alkaline-pancreatic medium (*Jour. A. M. A.*, Oct. 23, 1920, page 1120).

CAPSULES FOLIA - DIGITALIS - UPSHER SMITH AND TINCTURE OF DIGITALIS-UPSHER SMITH.—The Council on Pharmacy and Chemistry reports that these preparations, advertised and sold by Upsher Smith, St. Paul, Minn., were considered and found to have the status of official articles. For this reason they were not admitted for inclusion in New and Nonofficial Remedies (*Jour. A. M. A.*, Oct. 30, 1920, page 1205).

SUPSALVS NOT ADMITTED TO N. N. R.—The Council on Pharmacy and Chemistry reports that Supsalvs are advertised by the Anglo-French Drug Co. as "stable suppositories of '606' (of French manufacture)" with the claim that by rectal administration of these suppositories the effects of arsphenamine may be obtained. The Council found Supsalvs inadmissible to New and Nonofficial Remedies, first, because the quality of the medicament contained in the suppositories has not been

established and, second, because the claimed efficacy of this preparation as a means of securing the effects of arsphenamine lacks substantiating proof. In its report the Council quotes from L. W. Harrison on "The Treatment of Syphilis," from Schamberg and Hirschler on "A Safe and Efficient Intensive Method of Treating Syphilis," and from the report of the special committee on the manufacture, biological history and clinical administration of salvarsan and other substances of The British National Insurance Medical Health Research Committee, to show that the general opinion of experienced workers is to the effect that the rectal method of administering arsphenamine is ineffective (*Jour. A. M. A.*, Oct. 30, 1920, page 1219).

BOOK REVIEWS

GENERAL AND DENTAL PATHOLOGY, WITH SPECIAL REFERENCE TO ETIOLOGY AND PATHOLOGIC ANATOMY. A Treatise for Students and Practitioners. By Julio Endelman, M.S., D.D.S., and A. F. Wagner, A.M., M.D. With 440 illustrations, of which 340 in the section of dental pathology are original, and four colored plates. St. Louis: C. W. Mosby Company, 1919. Cloth, \$7 net.

While this work will appeal to dentists or the students of dentistry, yet it will also interest medical men. There is a crying need for more knowledge of bacteriology and pathology on the part of the average dentist, and it is hoped that this work, presented so well, will have a large sale among members of the dental profession. In the preparation of this book it has been the aim of the authors to treat the subject from the standpoint of gross and microscopic pathology, and the information offered will be found necessary in order to treat diseases on a rational basis. The book has been divided into two parts, the first dealing with general pathology, and this is no more nor less than a concise but well-written discussion of the facts pertaining to general pathology as found in the most up-to-date textbooks on the subject. Part second is devoted to dental pathology, and here the authors are presenting, in a comprehensive manner, a subject that is worthy of greater study on the part of every dental practitioner. In short, it deals with all of the dental diseases and abnormalities, with a discussion of the origin and manifestations from a pathologic standpoint. The book is well illustrated. Practically all of the illustrations in the section on dental pathology are original. The clinics and the laboratories have been made use of extensively in the collection of the data presented.

THE MEDICAL ASPECT OF MUSTARD GAS POISONING. By Aldred Scott Warthin, Ph.D., M.D., Professor of Pathology and Director of the Pathological Laboratories of the University of Michigan, Ann Arbor; and Carl Vernon Weller, M.S., M.D., Assistant Professor of Pathology, University of Michigan. 270 pages, with 156 original illustrations. St. Louis: C. V. Mosby Company, 1919. Cloth, \$7.

This book represents the work on a war research in the pathological laboratories of the medical department of the University of Michigan. The entire research was carried through a period of eighteen months in a most intensive manner, involving an immense amount of labor. Its success was made possible through the enthusiastic cooperation of the whole laboratory staff of the chemical warfare service of the government. A study of human material was

offered by one of the industrial plants concerned in the manufacture of mustard gas, and opportunity was given of not only studying the cases clinically but of performing necropsies on the fatal cases.

The work deals with the medical aspects of cases in warfare and the lesions produced. Special chapters are devoted to cutaneous, ocular, respiratory, and gastro-intestinal lesions, as well as chapters on the general and clinical pathology of mustard gas poisoning and the treatment of the injuries therefrom. The book concludes with a general summary of the subject and an excellent bibliography.

The whole work is most interesting and will prove valuable in placing before the medical profession comprehensive information concerning the effects of a gas that was very commonly used in warfare and may be used in future wars. The book is well illustrated.

A TEXTBOOK UPON THE PATHOGENIC BACTERIA AND PROTOZOA. For Students of Medicine and Physicians. By Joseph McFarland, M.D., Professor of Pathology and Bacteriology in the University of Pennsylvania. Ninth edition, thoroughly revised. Octavo of 858 pages, with 330 illustrations, a number of them in colors. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$4.75.

Notwithstanding the fact that the ninth edition of this well known book was prepared under the unfavorable conditions attending war service, the work represents up-to-date knowledge on the subject of pathogenic bacteria and Protozoa. The entire volume has been rewritten, old errors corrected, and much new material added. There is nothing more to be added to what we have said in previous reviews of this excellent work, and we unhesitatingly commend it as thoroughly practical and sufficiently comprehensive for the practitioners and students of medicine.

NERVOUS AND MENTAL DISEASES. By Archibald Church, M.D., Professor of Nervous and Mental Diseases in Northwestern University Medical School, Chicago; and Frederick Peterson, M.D., Formerly Professor of Psychiatry, Columbia University. Ninth edition, revised. Octavo volume of 949 pages, with 350 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$7 net.

Nine editions of a book generally bespeak for it a well-earned recognition on the part of readers. Such is true of this well known book by Church and Peterson. It is a carefully prepared textbook covering nervous and mental diseases in such a way as to make the book of practical value to the student and general practitioner. The literature of neurology and psychiatry has been sifted by the authors, and such digest revised in the light of their own experience in practice and in teaching. While no marked changes occur in the present volume, yet many chapters have been rewritten to conform to present thought on the subject, and to bring the book up-to-date. No radical views have been entertained, as the authors believe that conservatism is commendable and that theories, even though popular among a limited number, should be proven in the light of experience before being incorporated into a textbook that aims to be authoritative. The book is well worthy of the favorable recognition that has been accorded it.

DISEASES OF WOMEN. Including Abnormalities of Pregnancy, Labor and Puerperium. A Clinical Study of Pathological Conditions Characteristic of the Five Periods of Woman's Life. By Charles M. Green, A.B., M.D., Professor of Obstetrics and

Gynecology, Emeritus, in Harvard University, Senior Surgeon for Diseases of Women, Boston City Hospital, Formerly Visiting Physician, Boston Lying-In Hospital, Fellow of the American College of Surgeons, Fellow of the American Gynecological Society. With 12 full-page plates, one cut and 25 charts in the text. Price, \$6. Boston: W. M. Leonard, 1920.

Since its first application in teaching clinical medicine, the case history method has grown rapidly in popularity. That a second edition of this work seemed warranted is sufficient evidence that this was a valuable addition to the case history series. The text has undergone some revision and amplification but retains its unusually readable narrative style. It is refreshing to read in a modern text so little of the findings of the roentgen ray and pathologic laboratories.

In the matter of durability the books of the case history series might be improved considerably.

HANDBOOK OF DISEASES OF THE RECTUM. By Louis J. Hirschman, M.D., F.A.C.S., Vice Chairman, Section on Gastro-Enterology and Proctology, A. M. A.; ex-President American Proctologic Society; Professor of Proctology, Detroit College of Medicine; Proctologist, Harper Hospital; Major, M. C., U. S. A. (honorably discharged), Detroit, U. S. A. With 223 illustrations, mostly original, and 4 colored plates. Third edition revised and rewritten. St. Louis: C. V. Mosby Company, 1920.

A detailed review of a third edition is probably not advisable. It is well, however, for those unacquainted with the book to say that it is only a handbook designed especially for general practitioners and makes no pretense of being a complete treatise on the subject. Only such diseased conditions are considered as may be treated in the office by nonsurgical methods or by surgical methods not requiring confinement to bed nor general anesthesia.

There is a chapter by Jelks of Memphis on Dysentery and one by G. W. Wagner on the examination of the feces.

The book is a splendid one and should be in the library of every general practitioner in the country. The book would have been still more praiseworthy had the author simply mentioned the injection method of treating piles for the purpose of condemning it instead of damning the method with faint praise.

HUMAN PARASITOLOGY. With Notes on Bacteriology, Mycology, Laboratory Diagnosis, Hematology and Seriology. By Damso Rivas, B.S.Biol., M.D., Ph.D., Assistant Professor of Parasitology; Assistant Director of the Course in Tropical Medicine and of the Laboratory of Comparative Pathology and Tropical Medicine in the University of Pennsylvania; Pathologist to the Department of Health of Pennsylvania; Serologist to Friends Hospital, Frankford; Assistant Pathologist to the Philadelphia General Hospital; ex-Research Fellow in Biology and ex-Scott Fellow in Hygiene, University of Pennsylvania; Formerly Assistant to the Koch Institute, Berlin, and Co-Worker in the Pasteur Institute, Lille; Member of the Malaria and Tropical Diseases Commission for the Sanitation of Brioni, Istria and East Shores of the Adriatic, 1900-1902. Illustrated. Price, \$8. Philadelphia and London: W. B. Saunders Company, 1920.

In the not far distant past parasitology was thought to be largely a part of tropical medicine and therefore of little general interest. In more recent years possibly due to modern means of transportation an ever in-

(Continued on adv. p. xviii)

"Just What a Ligature Should Be"

Armour's Surgical Catgut Ligatures, plain and chromic, Emergency (20 in.), Regular (60 in.) lengths.

Sizes 000 to Number 4 inclusive.

Smooth, strong and sterile.

Iodized Catgut Ligatures.

Smooth, strong, sterile and very pliable, 60 in. lengths only.

Sized 00 to Number 4 inclusive.

Made from stock selected in the abattoirs especially for surgical purposes.

Pituitary Liquid (Armour) $\frac{1}{2}$ c. c. (obstetrical), 1 c. c. (surgical), oxytocic and stimulant. Free from preservatives.

Endocrine Gland and Organotherapeutic Products.

Literature to pharmacists, physicians and hospitals on request.



ARMOUR AND COMPANY
CHICAGO

5654

·SAVE MONEY ON YOUR **X-RAY** SUPPLIES

Get Our Price List and Discounts on Quantities Before You Purchase

HUNDREDS OF DOCTORS FIND WE SAVE THEM FROM 10% TO 25% ON X-RAY LABORATORY COSTS

AMONG THE MANY ARTICLES SOLD ARE

X-RAY PLATES. Three brands in stock for quick shipment. PARAGON Brand, for finest work; UNIVERSEAL Brand, where price is important.

X-RAY FILMS. Duplitzed or Double Coated—all standard sizes. X-Ograph (metal backed) dental films at new, low prices. Eastman films, fast or slow emulsion.

BARIUM SULPHATE. For stomach work. Finest grade. Low price.

COOLIDGE X-RAY TUBES. 5 Styles. 10 or 30 millamp.—Radiator (small bulb), or broad, medium or fine focus, large bulb. Lead Glass Shields for Radiator type.

DEVELOPING TANKS. 4 or 6 compartments stone, will end your dark room troubles. 5 sizes of Enameled Steel Tanks.

DENTAL FILM MOUNTS. Black or gray cardboard with celluloid window or all celluloid type, one to eleven film openings. Special list and samples on request. Price includes your name and address.

DEVELOPER CHEMICALS. Metol, Hydroquinone, Hypo, etc.

INTENSIFYING SCREENS. Patterson, TE, or celluloid-backed screens. Reduce exposure to one-fourth or less. Double screens for film. All-mental Cassettes.

LEADED GLOVES AND APRONS. (New type glove, lower priced.)

FILING ENVELOPES with printed X-Ray form. (For used plates.) Order direct or through your dealer.



If You Have a Machine Get Your Name on Our Mailing List

GEO. W. BRADY & CO.

782 So. Western Ave. CHICAGO

ACCEPTED "The Journal" August 7, 1920

AS CONFORMING TO THE
RULES OF

The Council on Pharmacy and Chemistry
A. M. A.

OVARIAN RESIDUE TABLETS, H. W. & D.
50 Tablets in a Tube

STERILE SOLUTION of LUTEIN, H. W. & D.
(Corpus Luteum)

In Ampules for Intramuscular Injection
6 Ampules in a Box

NOTE:—Reprints of papers by prominent gynecologists bearing on these remedies sent upon request.

HYNSON, WESTCOTT & DUNNING
BALTIMORE

(Continued from page 392)

creasing number of sufferers from "parasitic" diseases has been discovered in the temperate zone. The association of men from widely scattered regions, incident to military service, has given a tremendous impetus to the more general study of parasitology.

This work is by one of the world's foremost authorities, is very complete and beautifully illustrated. The author is to be especially commended for his exposition of methods of technic which are clear enough for the less experienced man to follow. The volume should find a place in every general medical library.

MANUAL OF OBSTETRICS. By Edward P. Davis, A.M., M.D., F.A.C.S., Professor of Obstetrics in the Jefferson Medical College, Philadelphia. Second edition. 12mo of 477 pages, with 163 illustrations. Philadelphia and London: W. B. Saunders Company, 1919.

With the above apology for manuals in mind the reviewer finds this little volume better than most of them. The description of methods in the management of labor are unusually clear. The illustrations are well chosen if schematic, and include none of the valueless pictures of rare monstrosities, etc., occurring in the author's practice.

DISEASES OF CHILDREN. By John Lovett Morse, A.M., M.D., Professor of Pediatrics, Harvard Medical School; Visiting Physician at the Children's Hospital, and Consulting Physician at the Infants' Hospital and at the Floating Hospital, Boston. Third edition. Price, \$7.50 Boston: W. M. Leonard, Publisher, 1920.

The author's original text of modest size has grown tremendously in its second and third editions. The

present volume is much more complete and more profusely illustrated than its predecessors. The arrangement of the cases and their indexing is worthy of especial mention.

In none of the case history series is the subject matter more clearly and concisely presented. The author is a master clinical teacher, with extremely definite convictions, and the possessor of a remarkable power of exposition. Certainly no practitioner who is called on to care for the diseases occurring during childhood should fail to avail himself of this work.

THE DUODENAL TUBE AND ITS POSSIBILITIES. By Max Einhorn, M.D., Professor of Medicine at the New York Postgraduate Medical School; Visiting Surgeon to the Lenox Hill Hospital, New York. Illustrated. Price, \$2.50 net. Cloth. Philadelphia and London: W. B. Saunders Company, 1920.

One cannot be expected to share fully the enthusiasm of the author and originator for the diagnostic and therapeutic value of the duodenal tube. Its value as a diagnostic aid in the study of gastro-intestinal diseases, however, has been definitely established. The other instruments described, namely, the pyloric dilator, aspirator, duodenal obturator, intestinal delineator, intestinal examiner, etc., are of more limited interest. In his preface the author expresses as one of his purposes in writing the book that of facilitating the use of these instruments in the hands of other men doing gastro-enterology and in this his work should serve admirably for the author has taken the greatest pains to give in detail all the "tricks" in their application.

Like all Saunders publications the book is beautifully gotten up.

The Diet in Typhoid

and other fevers and diseases
prevalent at this season

As the intestinal tract is seriously involved in Typhoid fever, the dietetic problem is one of first consideration. A liquid diet is largely essential, in which connection "Horlick's" has important advantages, being very palatable, bland and affording the greatest nutriment with the least digestive effort

Samples prepaid upon request

Horlick's Malted Milk Co. Racine, Wis.



Avoid imitations by prescribing
"Horlick's the Original"

Diphtheria Antitoxin Then *and* Now

When the **Mulford Laboratories** made the first antitoxin that was produced commercially in this country, in 1894, the doses were necessarily very large and bulky, and one ounce glass stoppered vials were used as containers.



Early form of
Antitoxin
Container

NOW, as a result of research and long experience, we are able to produce refined and concentrated antitoxin, testing as high as 3000 units and more per Cc. Furthermore, rigid check tests for potency and sterility guarantee the strength and purity of the product.

The **Mulford Laboratories** were the first to introduce a piston syringe container for antitoxin, and the present perfected syringe gives you a most convenient sterile container, ready for immediate use.

Mulford Diphtheria Antitoxin

Purified and concentrated
High potency
Low total solids
Same density as the blood
Dosage and sterility
guaranteed

The Mulford label is your guarantee of absolute reliability on Diphtheria Antitoxin and all other Biological Products.



Mulford Perfected Antitoxin Syringe

Ask for new booklet on Diphtheria Products.



H. K. MULFORD COMPANY, Philadelphia, U. S. A.

Removal Notice.—The executive, general and sales offices are now located in the Mulford Building, 640 North Broad Street.

46830

Mulford

THE PIONEER BIOLOGICAL LABORATORIES

Adrenalin in Medicine

3—Treatment of Shock and Collapse

THE therapeutic importance of Adrenalin in shock and collapse is suggested by their most obvious and constant phenomenon—a loss in blood pressure.

The cause and essential nature of shock and collapse have not been satisfactorily explained by any of the theories that have been advanced, but all observers are agreed that the most striking characteristic of these conditions is that the peripheral arteries and capillaries are depleted of blood and that the veins, especially those of the splanchnic region, are congested. All the other symptoms—the cardiac, respiratory and nervous manifestations—are secondary to this rude impairment of the circulation.

The term collapse usually designates a profound degree of shock induced by functional inhibition or depression of the vasomotor center resulting from some cause other than physical injury, such as cardiac or respiratory failure.

Treatment aims to raise the blood pressure by increasing peripheral resistance. As a rapidly acting medical agent for the certain accomplishment of this object Adrenalin is without a peer. In cases of ordinary shock it is best administered by intravenous infusion of high dilutions in saline

solution. Five drops of the 1:1000 Adrenalin Chloride Solution to an ounce of normal salt solution dilutes the Adrenalin to approximately 1:100,000, which is the proper strength to employ intravenously. A slow, steady and continuous stream should be maintained by feeding the solution from a buret to which is attached a stop-cock for the regulation of the rate of flow.

In those cases marked by extremely profound and dangerous shock or collapse the intravenous method may prove too slow or ineffective. Recourse should then be had to the procedure described by Crile and called centripetal arterial transfusion. Briefly it consists in the insertion into an artery of a cannula directed toward the heart. Into the rubber tubing which is attached to the cannula 15 to 30 minims of Adrenalin 1:1000 is injected as soon as the saline infusion begins.

The effect of this is to bring the Adrenalin immediately into contact with the larger arteries and the heart. Sometimes, even in apparent death, the heart will resume its contractions, thereby distributing the Adrenalin through the arterial system and accomplishing the object of this heroic measure—resuscitation and elevation of the blood pressure.



PARKE, DAVIS & COMPANY

THE JOURNAL

OF THE

Indiana State Medical Association

Owned, Published and Controlled by the Indiana State Medical Association

ISSUED MONTHLY under the Direction of the Council

VOLUME XIII
NUMBER 12

FORT WAYNE, IND., DECEMBER 15, 1920

PER YEAR, \$2.50
SINGLE COPY 25 CENTS

CONTENTS

ORIGINAL ARTICLES		PAGE	MISCELLANEOUS		PAGE
Silver Wire in Vesicovaginal Fistula. J. R. Eastman, M.D., Indianapolis	393		Deaths		410
Mediastinal Tumor. W. D. Asbury, M.D., Terre Haute, Ind.	398		News Notes and Personals.....		411
The Physician: Obligations to Reading and Study. Frank B. Wynn, M.D., Indianapolis.....	400		The Truth About Medicines.....		419
EDITORIALS			Book Review		xviii
Chiropractic Legislation	405		SOCIETY PROCEEDINGS		
Increased Cost of Maintaining Medical Societies.....	405		Indianapolis Medical Society.....		414
Chiropractic Advertising	406		Tippecanoe County		418
Editorial Notes	407				

NEXT ANNUAL SESSION, INDIANAPOLIS, SEPTEMBER 28, 29, 30, 1921. LIST OF OFFICERS AND COMMITTEES ON ADV. PAGE 2.
ENTERED AS SECOND CLASS MATTER, JANUARY 20, 1908, AT THE POSTOFFICE AT FORT WAYNE, INDIANA, UNDER ACT OF CONGRESS
OF MARCH 3, 1879. ACCEPTED FOR MAILING AT SPECIAL RATE OF POSTAGE PROVIDED FOR IN SECTION 1103,
ACT OF OCTOBER 3, 1917, AUTHORIZED OCTOBER 18, 1918.

Principles of BIOCHEMISTRY

DAILY MORE AND MORE IMPORTANCE is being attached to Biochemistry. In the practice of medicine the advances of biochemical knowledge and technic are furnishing the physician with diagnostic methods of precision and indications for treatment based upon exact knowledge. In this work Biochemistry is represented in close relationship to physiology, so that the student may perceive the intimate dependence of these two sciences and come to regard physiological chemistry as the foundation upon which we must ultimately build our interpretations of the functions of living matter.

The book contains a full discussion of nutrition, basal metabolism, endogenous and exogenous metabolism, hydrogen-ion concentration, ductless glands, acidosis, blood-pressure, vitamins, anaphylactic shock, diabetes, chemistry of respiration, temperature effects, osmotic pressure, cholesterol, creatinine, etc. Tables and formulae abound throughout the work, standard tests and reactions are given and methods and apparatus are clearly described and illustrated.

Emphasis has been placed upon the practical applications of the subject, and not only to the practice of medicine, but also upon applications to the industries and to general biology. Thus, this text-book is not only for medical students and students specializing in biochemistry and physiology, but for the agricultural student, the student of general biology or the industrial chemist engaged in handling biological products.

By T. BRAILSFORD ROBERTSON, PH.D., D.Sc., Professor of Physiology and Biochemistry, University of Adelaide, South Australia; formerly Professor of Biochemistry, University of Toronto; Professor of Biochemistry and Pharmacology, University of California. Octavo, 633 pages, with 49 engravings. Cloth, \$8.00 net.

PHILADELPHIA
706-710 Sansom Street

LEA & FEBIGER

NEW YORK
2 West 45th Street

THE INDIANA STATE MEDICAL ASSOCIATION

Next Annual Session, Indianapolis, September 28, 29 and 30, 1921

OFFICERS AND COMMITTEES FOR 1921

President.....DAVID ROSS, Indianapolis
 1st Vice President.....HUGH J. WHITE, Hammond
 2d Vice President.....IRA M. WASHBURN, Rensselaer
 3d Vice President.....OTTO R. SPIGLER, Terre Haute
 Secretary-Treasurer.....CHAS. N. COMBS, Terre Haute

SECTION OFFICERS

Surgical Section—Chairman, Charles C. Terry, South Bend; Vice Chairman, H. K. Bonn, Indianapolis; Secretary, E. E. Padgett, Indianapolis.
 Medical Section—Chairman, Fred R. Clapp, South Bend; Vice Chairman, George G. Richardson, Van Buren; Secretary, Claude S. Black, Warren.
 Eye, Ear, Nose and Throat Section—Chairman, William A. Hollis, Hartford City; Vice Chairman, Carl H. McCaskey, Indianapolis; Secretary, Eldridge M. Shanklin, Hammond.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

For one year (term expires December 31, 1921), Albert E. Bulson, Jr., Fort Wayne; George W. Spohn, Elkhart. Alternates, C. D. Humes, Indianapolis; B. D. Myers, Bloomington. For two years (term expires December 31, 1922), Dr. Joseph Rilus Eastman, Indianapolis. Alternate, M. R. Combs, Terre Haute.

COUNCILORS

Chairman—To be elected.

DISTRICT	TERM EXPIRES	DISTRICT	TERM EXPIRES
1st—J. Y. Welborn, Evansville.....	December 31, 1920	7th—S. E. Earp, Indianapolis.....	December 31, 1923
2d—J. B. Maple, Sullivan.....	December 31, 1921	8th—E. M. Conrad, Anderson.....	December 31, 1921
3d—Walter Leach, New Albany.....	December 31, 1922	9th—William R. Moffit, Lafayette.....	December 31, 1922
4th—A. G. Osterman, Seymour.....	December 31, 1920	10th—E. M. Shanklin, Hammond.....	December 31, 1920
5th—Spencer M. Rice, Terre Haute.....	December 31, 1921	11th—G. G. Eckhart, Marion.....	December 31, 1921
6th—Frank J. Spilman, Connersville.....	December 31, 1922	12th—E. E. Morgan, Fort Wayne.....	December 31, 1922
		13th—H. M. Miller, South Bend.....	December 31, 1920

American Laboratories

CLINICAL AND X-RAY
 formerly LABORATORY OF PATHOLOGY AND BACTERIOLOGY

Dr. Marshall D. Molay, Director.

Clinical Laboratory Analyses

Wassermann Test \$5.00

(also other complement fixation tests. Blood or Spinal Fluid.)

Lange Colloidal Gold Test of Spinal Fluid \$5.00

Autogenous Vaccines

In single vials or individual ampules \$5.00

Tissue Diagnosis \$5.00

Accurate analyses of all secretions, excretions and body fluids.

Complete X-Ray Dept.
 Diagnostic and Therapeutic

Mailing Containers on request.

Reports by Wire or Mail

1130 MARSHALL FIELD ANNEX BUILDING
 25 E. WASHINGTON ST. CHICAGO.



RADIUM

TUBULAR APPLICATORS
 NEEDLE APPLICATORS - FLAT APPLICATORS
 and
 APPLICATORS of SPECIAL DESIGN
 Complete Installations of Emanation Apparatus

SOLD ON BASIS of U. S. BUREAU
 of STANDARDS CERTIFICATE

Correspondence Invited By Our
 PHYSICAL, CHEMICAL & MEDICAL DEPARTMENTS

THE RADIUM COMPANY
 OF COLORADO, Inc.

Main Office and Reduction Works
 DENVER, COLO., U. S. A.

Branch Offices

108 N. State Street
 CHICAGO

50 Union Square
 NEW YORK

LONDON
 PARIS

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XIII

FORT WAYNE, IND., DECEMBER 15, 1920

NUMBER 12

ORIGINAL ARTICLES

SILVER WIRE IN VESICOVAGINAL FISTULA *

J. R. EASTMAN, M.D.
INDIANAPOLIS

Before anything was known of antiseptics or asepsis, J. Marion Sims was able to close a very large majority of an extensive series of vesicovaginal fistulae by the use of silver wire sutures. The success of Sims in this field established a general recognition of American gynecology in Europe. It is well known that at about the time of the Civil War, Sims went abroad. In the preface to his book on "Uterine Surgery" he says: "In 1862 I voluntarily left my own country on account of its political troubles." The success of Sims in the treatment of fistula in negroes of the South was epoch-making. It paralleled the success of McDowell in pioneer abdominal surgery. Both are immortals in American history.

It may seem unnecessary to speak at this time of the distinct advantages of silver wire as a suture material in this field. Certainly many surgeons need no reminder of this kind. It is for the reason that some eminent authorities do not recognize the advantage of silver wire that the subject is here presented.

Some distinguished leaders of surgical scholarship and practice advocate the use of other suture materials in this field. It has been stated that it is a violation of a surgical maxim to use a metallic suture in a tissue which is constantly in motion. I believe, however, that the use of silver wire in vesicovaginal fistula is rather to be considered as a contravention of a surgical dogma. Silver wire is always sterile.

It surely cannot be contaminated in the sense that absorbable suture material may become contaminated.

The value of silver as a bactericide is well known. One has only to refer to the sovereign germicide, nitrate of silver and the various silver albumen compounds which are so efficient, as antigonorrheica.

Perhaps one of the most enthusiastic friends of silver as a bactericide is Rovsing of Copenhagen, who uses silverized catgut and also silverizes his gauze.

Assuming that silver wire does possess virtues which cannot be attributed to other suture materials, so far as this particular field is concerned, it becomes an interesting study to determine the reason for this difference. It is hardly scientific to make the bald statement that the wire is so meritorious without explaining the rationale of its superior effect. After a considerable study of this problem clinically and some laboratory experimentation we are still obliged to admit that our faith in silver wire is based principally on empiric observation.

No comparative statistics have been prepared within recent years which could establish the superiority of the wire over chromic catgut, or over silkworm gut prepared in the modern way, but personal communications from a large number of my colleagues are confirmations of the thesis here set forth, i. e., that silver wire is the best suture material for the closure of vesicovaginal fistula.

The laboratory experimentation was interesting but not altogether conclusive. An attempt was made to determine whether the antiseptic property of metallic silver might have the effect of inhibiting the growth of bacteria along the wound line or on the denuded surface of the fistula prepared for closure.

A piece of silver wire was placed in a Petri-dish and the medium, agar 0.4 per cent. acid

* Presented before the Surgical Section, Indiana State Medical Association, at the South Bend Session, September, 1920.

inoculated with the *Bacillus coli*. After the growth of the *B. coli* had spread over the entire surface, it was noted that there was a slender zone along each side of the wire in which the

thoroughly and immersed in sterile water for some time and dried before it was placed on the Petri-dish, so that if any information was conveyed by this comparison, it was that chromic

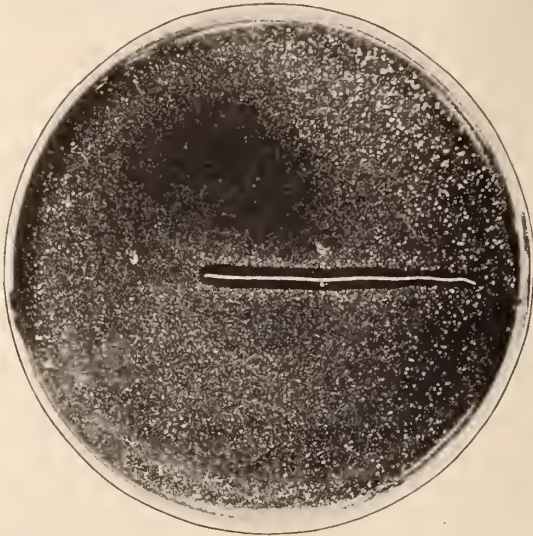


Fig. 1.—Strand of silver wire on Petri-dish. Growth of colony is inhibited along wire.



Fig. 3.—Plain catgut washed and dried after removal from glass tube inhibits growth of culture of *B. coli*.

growth of the *B. coli* seemed entirely inhibited. This experiment, which is an old one, suggested a distinct antiseptic or bactericidal action of the silver wire. However, on placing a short piece of chromic catgut No. 3 on a Petri-dish with the same culture medium and inoculating with the *B. coli*, it was observed after extensive growth

catgut is more strongly antiseptic than silver wire.

A similar test, made with plain catgut No. 3, was still more interesting inasmuch as several trials indicated that the growth of the *B. coli* colony would not approach the plain No. 3 catgut as closely as it would the silver wire. It

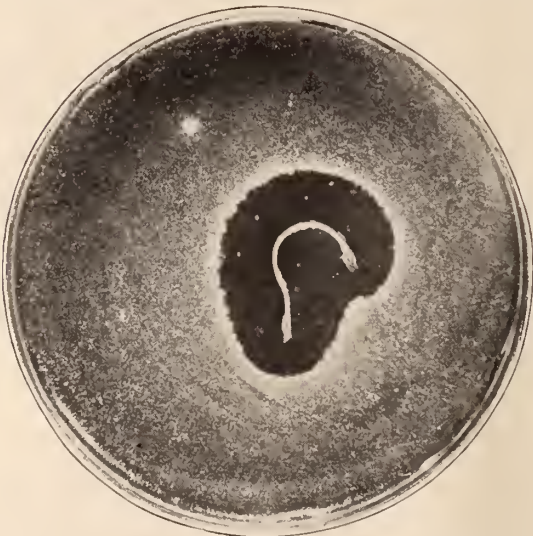


Fig. 2.—Number 3 chromic catgut after thorough washing and drying inhibits growth of colony.



Fig. 4.—Plain catgut soaked six days in urine inhibits growth of colony of *B. coli*.

of the colony that a much wider bare zone remained about the chromic catgut suture than appeared about the wire. It should be noted that the chromic catgut was washed very

is of course possible that technical errors are responsible for these results: however, since the catgut was always thoroughly washed and dried and since the trials were quite numerous we are

forced to conclude that in so far as the *B. coli* colony on the Petri-dish is concerned, the silver wire exhibits no superior bactericidal action. It is hardly fair to assume that silver wire has any selective effect on other bacteria of this region, for example, the Doederlein bacillus, which would increase its value by virtue of anti-septic effect.

An attempt was then made to determine whether the acidity of the vaginal mucus might exert a disintegrating effect on catgut and thereby decrease its tensile strength, or otherwise destroy its value in the closure of fistula.

It will be seen from the accompanying table that immersing the catgut for several days in water of various degrees of acidulation has no marked effect on the tensile strength of the catgut. A degree of acidulation much higher than that of either urine or vaginal mucus did as a matter of fact after several days reduce the tensile strength of the catgut somewhat, but it is doubtful whether it could not successfully resist the action of the low proportion of acid in the urine and it is certain that catgut, especially chronic catgut, retains its tensile strength in spite of contact with the vaginal mucus.

We were able to show, however, that immersion of catgut, either chronic or plain, in normal urine does materially weaken the gut. On gross examination it was noticed that catgut after two or three days immersion in urine was swollen, softened and much reduced in tensile strength as shown in the table below.

TENSILE STRENGTH OF CATGUT

	Breaking Point in Grams
Chronic No. 3 fresh from tube.....	4643.25
Chronic No. 3 in urine 6 days.....	3340.87
Chronic No. 3 in 0.75% acetic acid 6 days.....	5209.5
Chronic No. 3 in 1.5% acetic acid 6 days.....	2661.37
Chronic No. 3 in 3% acetic acid 6 days.....	2510.75
Plain No. 3 fresh from tube.....	4983.00
Plain No. 3 in urine 6 days.....	2887.87
Plain No. 3 in 0.75% acetic acid 6 days.....	4246.87
Plain No. 3 in 1.5% acetic acid 6 days.....	3340.87

As has been previously stated our belief in the superiority of silver is based chiefly on clinical observation, however, there is some reason to believe that the contact of urine may render catgut less efficient than a metallic suture in the closure of vesicovaginal fistula.

Whatever suture material is used the principle of funneling the fistula or tubulizing it by bevelling its margin is assuredly of importance. This principle is emphasized in the operation of Dr. C. H. Mayo in which a circular or oval incision is made in the vaginal mucous membrane about 5 mm. ($\frac{3}{16}$ inch) from the opening, completely around the fistula. The mucous

membrane is dissected toward the fistula, but care is taken not to break through its wall. This dissection should not approach too near to the fistula, and should penetrate as far as the blad-

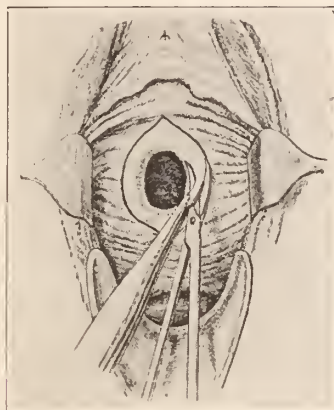


Fig. 5.—Denudation of edge of fistula (Warbasse).

der mucous membrane, but not through it. This converts the fistula into a tube with a funnel of vaginal mucous membrane at its lower end. A ligature carrier is then passed through the urethra into the bladder, and thence through

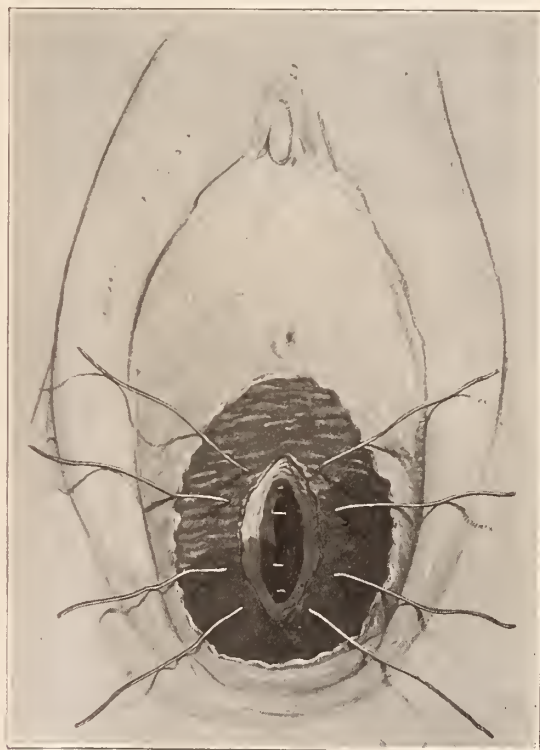


Fig. 6.—Bevelled edge of fistula in simple oblique denudation operation. Wire in position for closure of fistula.

the fistula into the vagina. A silk suture is passed through both sides of the vaginal mucous membrane funnel and threaded through the eye of the carrier. The carrier is then drawn out

through the bladder. The ends of the suture passing out through the urethra are drawn on and caused to invert the funnel into the bladder. One of the ends of the suture is threaded in a needle and passed through the skin of a labium. The two ends are then tied to make slight traction. A self retaining catheter is placed in the

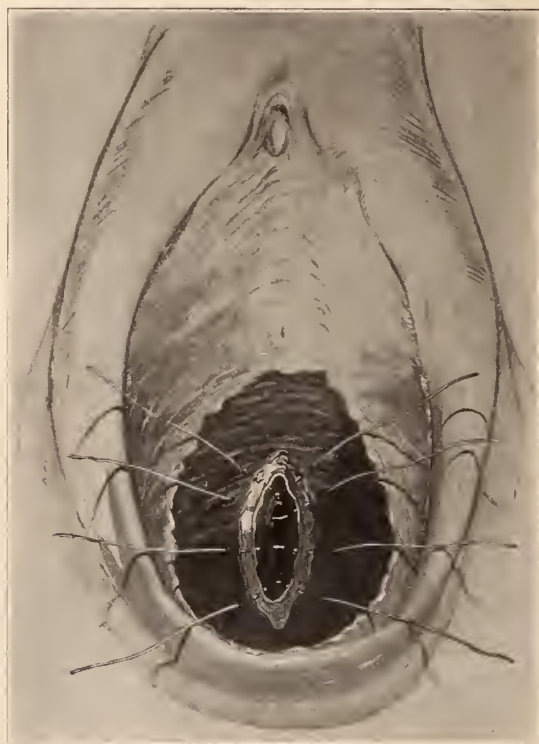


Fig. 7.—Split flap operation. Wire sutures matressed in bladder mucosa to turn the edges into bladder.

urethra to drain the bladder. The vaginal wound is then closed with a purse-string suture.

In preparing a patient for an operation for vesicovaginal fistula the urine should be rendered mildly antiseptic, for example, by the administration of cystogen. The surgeon should have good light and an ample exposure of the field of operation.

Most fistulae can be closed by the simple denudation operation in which the margin of the opening is pared away with a sharp knife, the freshening being made obliquely so that more is cut from the vaginal mucous membrane than from the mucous of the bladder, the margin of the opening of the bladder mucous membrane being merely freshened. The denudation therefore has a bevelled surface about 0.25 inch wide. The silver wire sutures should enter the vaginal mucous membrane about 0.25 inch from the edge of the wound, immerse at the margin of the bladder mucosa, re-enter at the margin of the bladder of the mucosa on the opposite side, im-

merging 0.25 inch from the edge of the vaginal mucous membrane. The wires should be numerous to leave a distance of not more than 0.125 inch between them.

In order that the silver wire may be passed readily I have had small gage silver wire brazed to the butt of a curved steel needle in a smooth manner so that the suture material becomes a needle pointed silver wire. When silver wire is threaded through the eye of a steel needle, an awkward lump is made at the eye by the loop of wire and this loop jerks and cuts as it is drawn through the tissues. The simple expedient of brazing the wire to the needle obviates this annoyance. As a rule it is easy to dissect free a firm fascia between the mucosa of the vagina and the bladder, therefore, it is usually best to "split the flap" all around the fistula, separating the mucous membrane of the vagina from the fascia and the layer of fascia from the bladder mucous membrane. The wire should then be introduced as indicated above, except



Fig. 8.—Simple purse string of silver wire for closure of small fistula.

that care should be taken to secure accurate approximation of the edges of the fascia and that the sutures should be matressed at the edge of the bladder mucous membrane, so that the margins of the bladder mucosa are turned upward into the lumen of the bladder. (See illustration.)

Small openings can be closed successfully by a simple purse-string of wire.

Much depends on provision for proper post-operative drainage of the bladder. It is of the greatest importance that there be no intravesical pressure to increase the tension on the sutures. This provision of course can be made by the use of an efficient retention catheter.

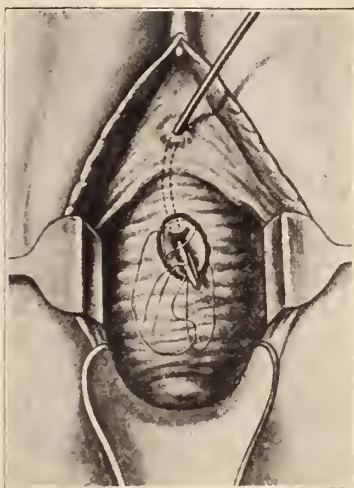


Fig. 9.—Ligature carrier for inverting and tubulizing fistula in operation of C. H. Mayo (Warbasse).

Attention is called here to the retention catheter devised by the writer and shown in the accompanying illustration. In the retention catheter of Skene, the intravesical olive tip has small pepper-box openings, which readily become occluded. In the retention catheter shown in the illustration, the olive tip is replaced by four hoops on rib-like bands, which retain the catheter in its position without obstructing its lumen.

In conclusion it is submitted that a comparison of the statistics of those operators who cling to silver wire in vesicovaginal fistula and the statistics of those who have been lured away

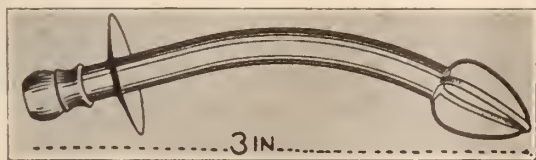


Fig. 10.—Author's retention catheter. Hooped intravesical end does not become occluded as does the olive with pepper-box openings in Skene's catheter.

from it, would make it clear that silver wire in vesicovaginal fistula is one of the most reliable resources of surgery.

DISCUSSION

DR. E. E. PADGETT, Indianapolis: I would say very briefly that Dr. Eastman taught me to use silver wire in the bladder. I have tried

other suture material since, but came back to silver wire. And I agree with all he said about getting results. I do not know just why he gets them, but he does. I have, during the last two years, made a modification that has served me better. I have had some leaking after silver wire alone, so I dissect the mucous membrane out, after a wide incision has been made, and bring the edges together, using ordinary plain No. 1 catgut; then I close it according to Dr. Eastman's method with silver wire. Theoretically, the catgut ought to do harm; practically, it has worked better for me than the silver wire alone.

I like Dr. Eastman's catheter for the reason he gives, that it stays open; but there is possibly one thing it does not do that a large rubber catheter will, and that is that it is rigid and stays where you put it. A soft rubber catheter does not become stopped up, and then the bladder may drain out some urine that will not come with a metal catheter.

DR. FRANK JETT, Terre Haute: This paper on the use of silver wire is quite interesting to me even if all the conclusions are empirical. I have used silver wire filagree in several cases of very large hernia, using it as loops in the line of strain. It is peculiar how this acts. It seems as if the presence of the silver wire causes a fibrosis, and there is laid down a new sheet of fibrous tissue. Perhaps this is due to a slight irritant effect of the silver wire. Silver wire has another strong point in that it does not strangulate tissue or cut through the tissue like silk or catgut. This is due to the fact that it does not angulate easily and put the strain on small areas. It is of value to know that silver wire has been used as sutures in these operations followed by good results. It is at least interesting to consider what the result would be with buried silver wire used as filagree. I would like to know what these cases would show a few months after operation in regard to the amount of fibrosis around the fistula's opening.

DR. LUTHER WILLIAMS, Indianapolis: I would like to add just a word to what Dr. Padgett said about dissecting the mucous membrane of the bladder. As Dr. Eastman said, we want to raise it up out of the urine, and I very often take a few sutures underneath after I have closed the edges like I do in a perineal operation, so as to bring the membrane together and bring it up out of the urine. I find that it has helped me a great deal. I especially like silver wire because I have had more failures with catgut, and silver wire seems to have taken me over those places in a great many instances. Another great aid is thorough drainage of the bladder. Almost any kind of catheter will do if you can keep it open and keep up the drainage. The metal catheter Dr. Eastman showed will not collapse and will not close up, and that is the

thing we need, thorough and complete drainage of the bladder.

DR. J. C. FLEMING, Elkhart: I would like to ask Dr. Eastman if his experience is the same in regard to the superiority of silver wire over catgut in cleft palate operations as well as vesicovaginal fistula? Also, I would like to have him explain in regard to this brazing of the silver wire on to the needle, whether he has a jeweler do it or does it himself?

DR. J. R. EASTMAN, Indianapolis: The wire is brazed to the butt of a steel needle with silver solder. A jeweler or an instrument-maker or any man who is at all clever with soldering tools can do it. Sandpaper the joint to make it smooth.

I do not use silver wire in cleft palate surgery. I do not think the choice of the suture material is important in cases of cleft palate. If one does not make lateral incisions a fine silkworm gut suture, or even chromic catgut will answer for the closure of cleft palate if it were easy to introduce it from a mechanical standpoint.

No doubt the first gentleman who spoke is near the truth when he says that the silver wire exerts a stimulating effect on the tissues and that the reason for success is to be sought on that line rather than through an assumption of bacterial action of the silver wire. I have never failed to close a vesicovaginal fistula with silver wire except once. Having Mayo's operation in mind, having just heard Dr. Judd read a paper at Kansas City on the subject, I made a Mayo operation and the fistula turned inside out like a coat sleeve. I used chromic catgut, and the fistula did not close. Then I went back to this old plan, used silver wire in the old way, and the lady went home with a bladder holding water like a jug. I have operated out in the country where the facilities were extremely inadequate for anything like good modern surgery, where there were lacerations involving the uterus itself, and the sutures have held. I have operated vesicovaginal fistulae after they had been operated on six or seven times and have not failed in any case except the one mentioned.

MEDIASTINAL TUMOR *

W. D. ASBURY, M.D.
TERRE HAUTE, IND.

The symptomatology of any mediastinal tumor will depend in part at least on its location. A clear understanding of the anatomy of the mediastinum is important. The mediastinum is the space between the two pleural sacs in the anteroposterior plane of the chest. In this

space are found all the thoracic viscera except the lungs. This space is subdivided into the anterior, middle and posterior mediastinum.

1. The anterior mediastinum is a narrow space lying in front of the anterior layer of the pericardium and immediately behind the sternum and is bounded laterally by the edges of the lungs. Anteroposteriorly it is shallow. It is narrow in the middle portion, wider above where the lungs diverge, and widest below. This space is occupied by connective tissue, a few lymphatic glands, the left internal mammary artery and vein, and when it still persists, the remnants of the thymus gland.

2. The middle mediastinum is occupied by the heart and pericardium, superior vena cava, the ascending aorta, the pulmonary arteries and nerves, the bifurcation of the trachea and the roots of the lungs with some bronchial glands.

3. The posterior mediastinum is triangular in shape running parallel with the vertebral column. It is bounded in front by the pericardium and the roots of the lungs, behind by the vertebral column from the lower border of the fourth dorsal vertebra and on either side by the pleura. It contains the descending thoracic aorta, the greater and lesser azygos veins, the pneumogastric and splanchnic nerves, the esophagus, thoracic duct, and some lymphatic glands.

In these spaces are found both benign and malignant growths. The benign growths are dermoid cysts, lipomata, fibromata, osteomata, enchondromata, exostoses, and enlarged lymph nodes.

A benign tumor may cause a fatal termination by its pressure symptoms.

The malignant growths are largely sarcoma and carcinoma.

The occurrence of benign tumors to malignant is in the ratio of 1 to 10.

It was formerly thought that carcinoma was more frequent than sarcoma but later statistics show that sarcoma occurs more frequently than carcinoma. This ratio varies with age. Before 30 years sarcoma will occur most frequently and after this age carcinoma.

The most frequent tumor of the anterior mediastinum is lymphosarcoma and of the posterior mediastinum carcinoma.

The malignant tumors arise very often from the thymus gland or its remnants, sometimes from the thyroid connective tissue and lymphatics.

The location of the tumor offers some diagnostic value. Fewer pressure symptoms are noted in posterior mediastinal tumors as a rule

* Read before the Section on Surgery, Indiana State Medical Association, South Bend Session, September, 1920.

than those of the anterior, however, pressure symptoms may arise early in anterior mediastinal tumors on account of compression of blood vessels, trachea, recurrent laryngeal and sympathetic nerves and bronchi.

Usually in cases of mediastinal tumor the pressure symptoms most prominent are: a slight bulging of the lateral or posterior chest wall, some limitation of the respiratory excursion, definite dullness, dyspnea and unproductive cough, sometimes fever, with later loss of strength and weight. The symptoms of these tumors are so varied that only a roentgen-ray examination of the chest together with blood picture and physical findings can differentiate some of them.

If there is great distention of the superficial veins of chest there would be suggested two conditions causing it, aneurism and mediastinal tumor; neither of which could be diagnosed without the aid of a roentgen-ray of the chest.

rapid heart action. Jumping or sudden jars do not cause pain. He has an unproductive cough, worse at night and in a prone position, but has never noticed any difficulty in swallowing nor any distention of the superficial veins of the chest. He has never had any cyanosis. There is no swelling of hands or feet. Recently he has experienced a feeling of fullness of chest and abdomen with some restriction of breathing. No numbness or tingling of hands or feet. Until now he has worked every day.

Physical Examination.—Patient is well developed and fairly well nourished. Mucous membranes pale. Temperature, 98.2; pulse, 124; respiration, 32. Defective hearing in left ear not of recent origin. Many pea to marble sized glands palpable in axillae and inguinal regions. There are a few cervical glands palpable. Visible enlargement of parotid glands. The thyroid gland normal in size. Liver and spleen both palpable. Liver dullness extends 2 inches below costal margin. Some tenderness can be elicited over spleen on pressure. No tenderness

Date	Red	White	Small Mono	Large Mono.	Trans.	Poly.	Myel.	Norm.	Meg.	Neut.	Eosin.	Baso.	Hemog.	Temp.
Jan. 9	4,228,000	24,000	87%	4	1	5	0	0	0	8	0	0	60	98.2
Jan. 11	3,000,000	27,600	76	10	7	7	0	0	0	5	2	0	65	100
Jan. 13	5,360,000	27,400	94	2	0	2	1	2	0	2	0	0	65	100.2
Jan. 14	4,616,000	25,350	92	2	2	4	0	0	0	4	0	0	60	99
Jan. 15	4,764,000	33,250	97	1	0	2	0	0	0	2	0	0	61	100.4
Jan. 16	5,528,000	36,600	97	1	0	1	0	0	0	1	0	0	59	100.5
Jan. 17	4,664,000	36,250	96	1	0	2	0	0	0	2	0	0	60	99.8
Jan. 19	3,840,000	23,600	79	10	5	6	0	0	0	5	1	0	58	100
Jan. 21	5,032,000	48,000	96	0	1	2	0	0	0	0	0	1	60	100.3
Jan. 22	4,930,000	47,450	94	0	0	2	0	0	0	2	0	0	60	99.6
Jan. 23	5,590,000	39,150	96	1	0	1	2	0	0	1	0	0	62	101.6

Substernal goiter may simulate very closely in symptomatology a mediastinal sarcoma or carcinoma.

Usually a Hodgkins disease can be readily differentiated.

REPORT OF CASE

M. B., a man, aged 26, an American by birth, was admitted to the hospital January 9 for observation on account of shortness of breath and weakness.

Previous Occupation.—Farmer; had served two years as soldier on Mexican border.

Previous Personal History.—Born and reared in the country, measles twice, a mild case in 1915 and very severe in 1917. In 1910 he had a very severe case of mumps. He denies syphilitic and Neisserian infection. Had drunk beer and whisky in moderation for five years.

Onset and Course of Disease.—Patient states he came for treatment because of weakness and shortness of breath. This trouble did not follow influenza nor pneumonia. His present trouble began about two months ago when he first noticed some shortness of breath, and precordial pain of a dull intermittent character. This is not aggravated by position, exertion nor following meals, but exercise may cause a very

over long bones or joints. No alteration in pulse wave or blood pressure on either side. Heart rhythm normal. Both sounds muffled and indistinct, no murmurs heard. Systolic pressure, 139; diastolic, 92. No tracheal tug. Pupils equal and react to light equally. No cyanosis present. On percussion there is an area of dullness anteriorly from second to sixth rib and extending farther to left than right. At Louis' angle this dullness extends about 1½ inches to either side of sternum and at fourth rib about 3½ inches to either side of sternum slightly more to the left and at the sixth rib this dullness extends to 1 inch outside the nipple line on either side.

This area of anterior dullness can be outlined in about the same area posteriorly but is less marked than in front. This area of dullness varies slightly when patient is being examined in the standing and lying positions. Neurological examinations negative.

Ophthalmoscopic examination revealed a normal fundus. The urinary and blood Wassermann tests were negative. Also negative for tuberculosis.

The blood examination on entrance was: Fresh blood; no parasites; no poikilocytosis, no anisocytosis; marked leukocytosis; red cells

somewhat paler than normal; red cells, 4,228,000; white cells, 24,000; hemoglobin, 60 per cent.. Differential count: small mononeuclear, 87 per cent.; large mononeuclear, 4 per cent.; transitional, 1 per cent.; polymorphoneuclear neutrophile, 8 per cent.; blood platelets negative.

The preceding chart shows the number of red and white cells with differential count, the hemoglobin and temperature taken almost daily over a ten day period. The small mononeuclear count usually above 90 per cent., the high white cell count, and the high red cell count with the hemoglobin percentage, are all interesting, but especially the small mononeuclear count.

At one time on account of the insistence of a very competent consultant that there was a large pericardial effusion present two paracenteses paricardii were done under fluoroscopic view with negative results.

The roentgen-ray examination of the chest at various times showed the outline of a mass filling a large space in the chest as shown by the skiagraph before you. When first examined the outline of the heart could be distinguished but later became obliterated.

DISCUSSION OF CASE

This case presents many features of a case of leukosarcoma described by Sternberg with tumor masses developed in some organ or tissue and an escape of a great number of lymphoid cells into the blood stream thus giving a leukemia blood picture. Naegeli and various other workers in this field claim that Sternberg's leukosarcoma is not a distinct entity but a form of lymphoid leukemia. Sternberg claims that these tumors arise in the mediastinum and breast and are not found in an ordinary lymphatic leukemia. McCallum is inclined to accept the nomenclature of Sternberg.

Although the age and sex of the patient, the glandular involvement and the clinical picture resembles some cases of Hodgkins' disease the blood picture is not in keeping with a Hodgkins. It is usually slower in its onset and course and has an increased polymorphoneuclear count with platelets present, with low white count and usually has a diminished leukocyte count. On making a histologic examination of a section from the glands of the axilla it was found negative for Hodgkins.

The blood picture with the small mononeuclear count above 90 per cent., the onset and course of the disease with glandular involvement resembles very much many cases of lymphatic leukemia, especially in the early and atypical cases. There are seen cases of lymphatic leukemia with a white count below 50,000

and also an involvement of the mediastinal glands, but not usually so extensive as this case presents. The small mononeuclear count in this case I believe to be an infrequent finding in a case of sarcoma of the thymus gland.

This patient worked every day until admitted to the hospital on January 9. He grew rapidly worse, with more labored breathing, could not lie down, loss of strength and weight and died on February 22, about six weeks after giving up his work, or three and one-half months after his first notice of any symptoms of this disease. There was little change in the blood picture.

PATHOLOGIST'S REPORT OF NECROPSY

Tumor of thymus gland. Metastasis found in lungs, heart, lymph glands, liver, spleen, suprarenal glands and kidneys. The character of the tumor is that of the small round cell sarcoma type originating in the thymus gland.

THE PHYSICIAN

OBLIGATIONS TO READING AND STUDY *

FRANK B. WYNN, M.D.
INDIANAPOLIS

Time was, within the memory of many still living, when a dozen books was considered a good private library in the Central West. The grandfather of the writer landed at Norfolk, Va., in 1818, coming overland and by flatboat to the new settlement of Brookville, Indiana. He brought as his most precious belongings a collection of books which were freely loaned to the pioneer settlers. The late Thomas A. Goodwin is authority for the statement that these constituted the nucleus for what he believed was the first circulating library in the state. The most devoted readers of these books were James B. Eads and Dr. George Berry, the latter a remarkably virile character who by his long career and intimate professional friendships linked the renowned Dr. Daniel Drake, of early Cincinnati history, with the distinguished surgeon, George Blackman, of Civil War days. Of the same heroic mold were Ephriam MacDowell, Austin Flint and Samuel D. Gross of Kentucky; John S. Bobbs of Indiana, and N. S. Davis of Illinois. Their names are mentioned in order to call attention to the range of their reading and the quality of their writing. They read but few books but they were good books and well read.

* Eighth of a series of articles by Dr. Wynn which will appear regularly in THE JOURNAL.

To thoughtful reading they added reflection and meditation. On these accounts they developed wonderful powers of observation, analysis and initiative. Their writings impress one by their lucidity, force and originality. There was something about the method and environment which produced giants in those days. It was true of medicine as it was of other lines of mental activity. In the realm of civil engineering, it gave the world-famed bridge-builder, James B. Eads, who, with Dr. Berry, read the well chosen little library at Brookville. In the field of religion it produced Henry Ward Beecher, beginning his life-work at Lawrenceburg and winning fame at Indianapolis; in civic and political life, Abraham Lincoln, whose birth was on the hospitable soil of Kentucky, whose youth was spent in the wilds of southern Indiana, and whose fame was achieved in Illinois.

May we not learn most valuable lessons from the latter's reading habits? To whom may we go for clearer logic in thought or finer diction in human speech; from whom may we gain deeper insight into human nature or fairer judgments in the balancing of justice and right? Note the character of the library which was the mental storehouse from which he drew during the molding period of his life. Seven volumes—the Bible, Esop's Fables, Bunyan's Pilgrim's Progress, History of the United States, Green's Life of Washington and the Statutes of Indiana. Can you not easily imagine the lank youth in the long winter evenings, sprawled on the floor of the cabin, before the great fire-place, devouring these precious books? He read, reread and pondered their great primal truths, working them deep into his subconscious nature. There was no confusion of brain from multiplicity of books. He was not compelled to stem the tide of frothy literature which sweeps the world today—effervescent with erratic theories and steaming with sensationalism. The stream of literature from which he drank was unpolluted. Let us not so much deplore Lincoln's literary privation as to give thanks that what he read was good.

No mechanical device has wrought wider influence on the progress and happiness of the human race than Gutenberg's invention of the printing press. Its beneficent influence is seen in the beautiful library buildings with their wealth of books, which ornament almost every city and town. Next to the public schools these occupy a place of deepest affection and pride in the hearts of the citizenship. Unfortunately, the great stream of book-knowledge overflowing the world, besides bearing knowledge floats rub-

bish which is clogging the course of progress. How to clear the current of obstructing drift and salvage the good is a serious problem for librarians and teachers. It is for them not merely to put the best books on the shelves but to lead and direct how and what to read; for in reading we are just as prone to bad habits as in manners.

From the days of Ben Franklin the newspaper has wielded a potent influence in civic life. Franklin's idea was that the newspaper should first of all be educational. The dominating thought of our day is that the function of the press is to *give the news*. So there is the mad rush all over the world to learn what is going on. The press has taught us to believe that we must keep in touch not merely with our neighbors and townsmen but with those in remote parts of the earth. The newspaper greets us before breakfast, and after dinner at night, teeming with information, good and bad, great and small, in such mass, that at most we can only skim over it. All have the newspaper reading habit. That it offers entertainment, none can deny; but who has calculated the waste of time which it entails? For those engaged in professional, educational or artistic work, it were better to be content with perusal of the headlines; a few minutes only to the salient facts of informational value.

Most of all it seems to me the physician should not give himself over to the habit of newspaper reading. His education and training, his social and cultural position in the community have not merely cultivated a taste but brought upon him an obligation to give some attention to high grade current thought, as set forth in standard magazines. Before this, however, I should like him to be a student, acquainted with a few of the better works in literature.

First of all familiar knowledge of the Bible (not that its ethical influence is needed) is most valuable. It is a historic exposition of the first great attempt at preventive medicine, instituted by Moses, who was also the first great law-giver. In literature what is more sublime than the poetry of David or more heroic than the drama of Job? Where will be found sounder philosophy or keener wisdom than in the Proverbs of Solomon? From what source may we learn better the sweet charities and sympathetic ministrations which should be interwoven with the life of the true physician, than from the Man of Gallilee? Next to the Bible should come Shakespeare, most critical student of human weaknesses and human powers; or in the field of romance the works of Charles Dickens. Or, if the physician would see mirrored with faith-

fulness and delicacy the common folks and things of our daily lives, where will it be so beautifully done as within the pages of Goldsmith, Burns or James Whitcomb Riley? All this is heroic or sentimental. The harrassed physician would have relaxation and amusement. What joy and refreshment come from a perusal of Mark Twain! A few will crave the entertainment of romance. Besides the works of standard fiction one may occasionally give his attention to a popular novel, but this is fraught with danger, for the modern novel reading habit is as profitless as the newspaper habit. Professional pride should prompt us to become familiar with the writings of Oliver Wendell Holmes, S. Wier Mitchell, Conan Doyle and other medical men who have attained distinction in the field of literature. The brief list may be varied according to taste. So far as the physician is concerned the plea here made is for less newspaper reading; fewer and better books, and on no account literary gormandizing which leads to atrophy of medical interest. Literary culture should supplement, not supplant, medicine.

A fact too seldom appreciated by the profession is that in medical reading one is just as prone to consume trash as within the pages of a newspaper. *What to read and what not to read* is a serious problem which confronts every physician. Unfortunately, the average man reads too little; reads unsystematically and without discrimination. He gives more thought to the quality of the food he eats than the character of the medical literature he consumes. He fails to apply tests as to its quality; nor is he particular to ascertain its source and environment. Cheap postal service, cheap printing and the greed of commercialism have united to corrupt and deceive the unwary physician. Quick to resent brazen quackery flouted from the pages of the lay-press, he is slow to recognize the same commercial wolf in sheep's clothing, disguised in a medical journal. Our mail is glutted with brochures from pharmaceutic houses so skilfully cloaked in the guise of science, that we fail to see the commercial animus back of it all. Some of the literature emanating from such sources is scientific and trustworthy. Taken all in all, however, the conclusions drawn are insufficiently supported by data worthy of credence. The thing for the physician to remember always, is the commercial motive of appeal. Most of all should he avoid becoming a prey to the reading of such literature. Let him scan hastily and with critical eye, reserving time for medical reading which emanates from entirely trustworthy sources.

A few simple rules should govern the selection of both the medical books and journals one reads. The charge of ultraconservatism should not sway the physician from sticking rather closely to recent issues of classic texts which long years and many editions have proved out as containing the truth. It were as wise to cast aside Shakespeare, Byron and Longfellow for the routine newspaper rhymester, as to discard in medicine, for example, a text like Osler or Flint, for some of the current medical volumes. Nor is this to be interpreted as an argument against buying new books; rather it is a plea that we should select and peruse them with critical discrimination. Who is the author? What is his character and scientific pedigree? What have been the sources of his scientific and clinical data? Is the work merely a compilation prepared by salaried clerks, stamped with the author's name, or does it bear the marks of an earnest and thorough personality? Is the author an attendant at medical meetings and does he enjoy amongst his intimate colleagues a reputation for honesty and painstaking methods? Does the book have the ear-marks of personal advertisement, or is it permeated by the spirit of true scientific zeal? Is the reasoning sound: are the data trustworthy and convincing? The same rules may be applied to medical journal articles. The particular topic will have its appeal according to the taste and training of the reader. The informative value will be determined by the credibility of the author, his opportunities and experience, the marshalling of his facts and the force and lucidity of his reasoning.

To stimulate the habit of reading the plan is commended of having always in mind two or three topics of current interest on which to concentrate reading efforts. All available literature should be consulted on these subjects, notes made and filed of the salient points, and the bibliography given. To still further hold the undivided attention it will be found advantageous to underscore sentences and phrases of significance. Marginal notes should be recorded which may be critical or commendatory; and brief notation made of new ideas suggested by the article. For be it remembered that the purpose of reading is not merely to gain the viewpoint of the author, but to stimulate new reactions in the reader. A chapter in a book or an article treated as above suggested becomes readily available for future reference. If filed, one needs but to glance at a page to get the kernel of interest which made deep appeal in the first reading.

If medical journal files are not available, a capital idea is to clip out the articles of particular interest and file them in a textbook under the chapter dealing with that particular subject. One of the best read men in medicine that I have ever known has followed this plan for years. Professional friends knowing his habit, make free to consult him concerning matters of rare medical interest. He proceeds to extract from his library the pet volume dealing with the subject inquired about, and there under the proper chapter will be found a whole series of articles which would require two or three hours to look up in a well regulated medical library. An index file of clippings and reprints is quite valuable—especially to the person who does much medical writing or lecturing. For the average man, however, I believe that the former plan is more practicable—certainly more likely to be adhered to faithfully, for it is simpler and quite usable.

In larger cities where good medical libraries are available, the plan of reading up on particular subjects, will of course be different. The *index medicus* or more condensed and less complex quarterly review of current medical literature published by the American Medical Association are here available. Some of the articles listed are on the shelves; but not a little disappointment will be experienced to find how many are not available. The rarer publications may be secured by loan from the librarian of the Surgeon-General's Office through the local library.

The more important purpose of this discussion is to make suggestions for those who have not large, well selected medical libraries at hand. The Medical Reading Club should occupy a large place in our professional life. The co-operative plan has been tried, with only fair success. Each member subscribes for a different list of journals. Effort is made to rotate these systematically amongst the membership of the club, which is the weak feature of the plan. Far more preferable is it to have stated times of meeting, when articles are parcelled out to members for reading and review at subsequent meetings. The ideal consummation of this plan will be attained by a library room in common, with attendant, telephones, comfortable chairs—a place of friendly rendezvous. I have seen this tried with most gratifying results. It not merely improves the current medical knowledge of the members, but better still begets professional comradeship and develops a finer ethical and scientific *morale*.

The physician's subscription list of medical journals will vary of course according to loca-

tion, financial status, taste and the character of practice in which he is engaged. Whilst specialists should subscribe for the standard journals dealing with the particular field in which they practice, their reading should by no means be confined to these. Such owe it to themselves to keep in touch with pathology, general medicine and surgery. For all classes of practitioners, the following at least should be taken:

Journal of the American Medical Association, or of any other medical organization of which the individual is or should be a member.

Journal of the State Medical Association, and any local medical journal of reputable standing.

Metropolitan medical journal from some medical center remote from the place where resident.

For specialists: one or more of the standard journals dealing with the line of practice in which the individual is engaged.

Not less difficult than *what* is *when* to read. And here let us admit that we are less systematic in our medical reading than in our patronage of the lay press. What physician who has access to daily papers is content without looking over the morning issue at breakfast time, and the evening edition after dinner? Should we not be as fair to our medical reading, which presumably is more important for us than the daily doings of the world? The plea then of lack of opportunity is a species of *can't* that we should have the courage to resist. A man should and *can* find time for medical reading. The trouble is that we do not plan for it, and hold ourselves rigidly to the job. Let it be granted that our reading must in the very nature of things be fragmentary. This, however, does not justify its abandonment.

A few men possess the courage and resolution to set aside and adhere to a specific time for reading—a half day once a week, or an hour or two each day. A placard should be posted in the office calling attention to this schedule and emphasizing its importance. To insistent patrons who would break in on this program emphatic reply should be made as to its necessity, for the doctor's progress and the patient's benefit. Unusual emergencies only should be permitted to interfere with the carrying out of the program.

However excellent the plan suggested, most men will trust to haphazard reading as snatches of leisure time occur. What with the press of duties and frequent interruptions, both the quantity and quality of reading is apt to be unsatisfactory.

Urgent exhortation is here made against the

physician's thoughtless wasting of time—such as casual gossip at the club or drug store; visiting unduly with patients; matters entirely without the pale of medicine, as literary and social clubs, educational and religious enterprises. What a vast waste of time takes place in obstetric practice. During the tedious waiting hours, instead of regaling the family with professional experiences and anecdotes, why not devote the time in considerable measure, to professional reading? One should always carry a medical journal for perusal at such times; likewise on the street car, train or wherever a few chance minutes may be made available for reading. Only a few days ago a physician of national eminence remarked to me that the very best of his medical reading, thinking and writing was done aboard train.

These obstacles which beset the way of the physician in the life-long evolution of his scientific training and culture should not baffle his progress. They should be to pride and aspiration what a great mountain peak is to the mountaineer—a challenge inviting him to heroic contest with entangling forests, treacherous glaciers and forbidding precipices, before the summit is attained with its splendid reward of encompassing visions. No less a challenge to us, the mountain of medical truth, daring us to ascend by the route of study and reading—a tedious and difficult climb, but one which must be made to get a breadth of view in medicine.

It is complimentary but regrettable that the lay public so often considers the physician a walking encyclopedia prepared for all inquiries and emergencies. In silent pride of manner we are generally foolish enough to accept the layman's appraisal of our wisdom and flatter ourselves that we are amply able to deal with both the diagnosis and management of a case without reading up on it. Certainly few of us would have the temerity to request of an admiring layman the privilege of consulting the literature before venturing an opinion. Such conduct would offend our pride and excite suspicion as to ability! How different the attitude of the attorney. He frankly admits that he does not know but promises to read up the law in the case and give an opinion later. Whilst in average ability, culture and character, the medical profession probably does surpass the legal profession, here is one custom of our legal friends which we should more frequently emulate.

There is basis for the criticism recently made to me that physicians as a rule read too little and read unsystematically. Too often it is true that once graduated the physician ceases to be a student, save in the matter of business getting

and learning the practical "kinks" in the management of cases. Very justly he pleads multifarious duties as the excuse for failure to read as he would like to do. Recognizing the force of his contention, medical schools are now impressing on students the need of reading up in the texts on cases studied; also the importance of searching the various medical journals for recent articles dealing with the newer medical problems. The thought is to teach the student how to read, to the end that he may develop good reading habits, as the most substantial foundation for his future progress in medical study and practice.

For the country practitioner whose long rides and monotonous tasks of dispensing, consume so largely of time, one is most sympathetic. In the case of some practitioners, a mere glance at the office is sufficient to tell the story of lapse in the matter of reading and study. Unopened medical journals litter the table and too few new volumes brighten the appearance of his gloomy library. Nor can invidious distinction be drawn as between the city and the country doctor. After all it is the man. Remoteness from large medical libraries does not excuse one from not having good books and standard medical journals. Not infrequently the derelict medical reader is a man of distinction, so busy in answering the medical and surgical demands of the community that he forgets to step out of the professional rut in which he moves, to see what other more progressive practitioners are doing. He is satisfied with the consciousness that he has gained a reputation and a large practice. His conscience is soothed by the fact that the public approves his professional conduct. What boots it therefore if he is short on the recent advancement of medicine. Too often a man of this type wields a deleterious influence on the younger generation of his colleagues. The world may establish a standard by which to measure physicians based on the quantity rather than the quality of work. But it ill becomes our profession to bow before such wordly standards. Rather let the award be to those who hold aloft the ethical and scientific ideals which inculcate the thought that first of all, and for his whole career, the physician should be a reader and a student, searching for the light of truth. Diligence in medical reading, reinforced by careful writing equips the physician in the fullest sense for medical practice, and enables fulfillment of the expressive quotation from Sir Francis Bacon:

"Reading maketh a full man; conference a ready man; and writing an exact man."

(To be continued)

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

Office of Publication, 406 West Berry St., Ft. Wayne, Ind.

DECEMBER 15, 1920

EDITORIALS

CHIROPRACTIC LEGISLATION

The chiropractors have had a state convention and announced that at the next session of the Indiana legislature an attempt will be made to secure the enactment of a law that will give the chiropractors a special examining board.

In the first place there is no occasion for having a multiplicity of boards to pass on the requirements of those who desire to treat the sick. In the second place it would be distinctly class legislation to permit the chiropractors to observe any less requirements for treating the sick than are required of anyone else. Thirdly, no person should be permitted to treat the sick without proving to the satisfaction of the examining board that he possesses a knowledge of the fundamental branches which go to make up an intelligent conception of the nature and cause of disease. Fourthly, the public is entitled to protection from the work of the ignorant and incompetent.

No chiropractor can have an intelligent conception of the nature and cause of disease, nor formulate a rational basis for treatment without having been adequately trained in such fundamental branches as anatomy, physiology, pathology, bacteriology, and physical diagnosis, and such training cannot be secured in the few weeks that are given to chiropractic schooling before men and women are turned out as full-fledged practitioners of the chiropractic creed. Opinions may differ as to the kind of treatment to be instituted in any given disease, and the practitioner of whatever school should be permitted to employ the treatment that in his individual judgment may seem best adapted to the case, but there are certain fundamental facts pertaining to the body in health and disease which must be known by everyone who attempts to treat disease or we are falling short of using any intelligence in caring for those who deserve and should have the best type of intelligence as exemplified by comprehensive education and adequate training. In fact, if education means anything at all in any profession or vocation, it means much in the practice of the healing art;

and if a bunch of uneducated, untrained and wholly impractical men and women, like the chiropractors, are to be recognized legally, then it is time for us to quit paying taxes to support research laboratories and educational institutions of every type.

INCREASED COST OF MAINTAINING MEDICAL SOCIETIES

The high cost of living has hit the American Medical Association a solar plexus blow. At a specially called meeting of the House of Delegates the A. M. A. dues were increased to \$6 per year, the new arrangement to be effective January, 1921. In commenting on the necessity for securing an increased income the Board of Trustees made a statement which showed that all expenses of the Association had been enormously increased in consequence of the increased cost of labor and material, and that while there had been some increase in the income it was not sufficient to cover the inevitable deficit that would occur with present prices. Concerning the cost of *The Journal of the A. M. A.* it was stated that today the paper is costing 154 per cent. more than in the year 1914, and labor in the mechanical departments has increased approximately 139 per cent. in the same time. They also stated that labor in clerical departments has increased about 100 per cent.

As might be expected, some opposition was made to the proposed changes at a time when prices seemed to be falling. The answer is that both labor and materials will have to come down a good deal before *The Journal* can be published at its present price without a great loss. As a matter of fact, labor in the printing trades, controlled by the strongest labor organizations, will not come down for many months, as already most of the printing houses have wage contracts running well on to two years, and even when the price of labor does drop it is not likely that it will ever go back to where it was even a few months ago. Furthermore, the outlook as to a drop in the price of paper is not at all encouraging, as the mills have orders which will keep them busy for many months to come, and even then there is little prospect that there will be any great reduction in price.

Concerning the increase in the cost of labor the average reader may not know that even during the last two years compositors, press feeders and pressmen have received steadily increasing wages from an average of \$27.50 per week up to \$50.50 per week at the present time. Bindery workers, machinists, cutters, and workers of every type have had proportionate increases.

The astonishing feature is that the Board of Trustees has asked for but a 20 per cent. increase in the dues, when admitting that they think another increase may be required at the Boston meeting, to go into effect in 1922.

What has occurred in connection with the publication of *The Journal of the A. M. A.* has occurred in the publication of newspapers and periodicals of every type. Increased subscriptions and increased advertising rates have been imperative in order to prevent bankruptcy. The Indiana State Medical Association is fortunate in having a balance on hand so that at the present time it is possible to meet the increased demands without further increase in the dues. THE JOURNAL, like all other publications, has had to face the high cost conditions, and was threatened with a large deficit at the end of the present year had it not been for an increase in the subscription rate. However, we have not been prepared for the rapidly rising cost of publication occurring during the past few months, and in consequence it is absolutely necessary to increase the income through an increase in advertising rates, and a further increase in the subscription rate if THE JOURNAL is to be continued in its present size. Falling prices are not going to alter the situation, because at best our present income is far below the level of what falling prices will reach. However, while the Association must expect to appropriate a little more money in order to maintain THE JOURNAL, there will be no necessity of increasing the dues, nor will there be any heavy drain on the treasury which at this time contains ample funds to meet present emergencies.

CHIROPRACTIC ADVERTISING

In many states, and noticeably in Indiana, the chiropractors are busy spreading a propaganda which has as its aim the recognition of chiropractic as a distinct school of medicine and deserving of widespread acceptance on the part of the public. Newspapers are carrying columns and sometimes several columns of paid advertising in which the most absurd and inconsistent statements are made concerning the cause, symptoms and treatment of disease. There is not the slightest doubt that this propaganda is securing converts among the ignorant and unthinking, and is doing an immense amount of harm in hindering the progress of scientific medicine.

Is anything being done to offset this vicious propaganda? Precious little! The regular medical profession, composed of educated and well-trained physicians, views this growing evil with complacency and scarcely turns a hand to

counteract the baneful effects of such teaching. Why should we permit the public to hear only one side of the story and that side conveying nothing but falsity and glaring inconsistencies concerning disease and its treatment and even the fundamental and established facts concerning anatomy? Is it any wonder that we find difficulty in preventing legislation that retards progress when we fail to take steps to offset the influence of such ignorance and fallacious reasoning as is being put forth in the public press today by the chiropractors? We certainly are being strangled by the halo of professional decorum and smothered by the cloak of ethics which prevents us from protecting a credulous public that is ever ready to take up with specious arguments put up by charlatans and incompetents who recognize the value of publicity.

We are not in favor of advertising the regular medical profession, but we are in favor of adopting measures to present facts before the public so that such vicious propaganda as is now emanating from the chiropractors will have less fertile ground in which to thrive. The regular medical profession, as a profession and not as individuals, should take steps to offset the ignorant and misleading statements that are being made. It is not enough to say that the arguments advanced by the chiropractors are so fallacious as to be given scant attention by educated and thinking people, for we know that few people, whether educated or not, have any well-defined ideas concerning the nature and cause of disease, and by far the great majority of people who are generally well balanced mentally are hopelessly credulous when it comes to a consideration of health and grasp at that which is most alluring as a remedy for ailments.

The imposter, who is either an ignoramus or a knave, generally both, always offers that which is most alluring, and depends on exploitation of himself and his wares to reap returns. If he meets with no opposition, he reaps a harvest and he continues to reap a harvest until he is discovered; but the trouble of it is, when he is gone another takes his place and the fleecing goes on as before. If we are ever going to stop this humbuggery, which is a growing evil and threatens to undermine the standing of the medical profession, we must go to the trouble and expense of educating the public, and the way to educate the public is through the public press, a fact that is well recognized by those who today are spreading the chiropractic propaganda.

Our own idea is that our state medical association should present to the people, through the public press, some information which clearly and unmistakably points out the ignorance and

fallacy of the reasoning that is being placed before the people through the medium of the chiropractic advertising. The public has a right to know and should be impressed with the fact that no person can acquire an intelligent idea concerning the nature, cause, and treatment of disease through a few weeks training in a chiropractic school. It also should be shown that if education counts for anything in any vocation it counts for something in the practice of medicine, and that without a thorough grounding in such fundamentals as anatomy, physiology, bacteriology, pathology and physical diagnosis, which knowledge cannot be acquired in a few week's time, it is the height of absurdity to attempt to diagnose and treat diseases of the human body. The public should know that the regular medical profession does not care how any one shall treat disease, providing the person who attempts to treat disease has been well grounded in the fundamentals, and it should be pointed out that the courses of instruction in our state universities are none too long to afford an education actually needed in order to be anywhere near well trained to recognize and treat diseased conditions intelligently. Not only should the public know that chiropractors should not be recognized legally, but the public should know how utterly ignorant and fallacious is the chiropractic teaching. Some measures should be adopted to educate the public in view of the propaganda that is being put out by the chiropractors at the present time, and the suggestions we have made we believe are worth considering.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THE Season's Greetings to all our readers!!

HAVE you paid your medical society dues? Why not surprise your county medical society secretary by sending him a check without being solicited?

DR. H. D. FAIR of Muncie has been appointed chairman of the Committee on Necrology of the Indiana State Medical Association to succeed Dr. G. W. H. Kemper, who has removed to California. Dr. Fair solicits the cooperation and help of all members of the Association and in particular the county medical society secretaries.

ACCORDING to *The Journal of the A. M. A.*, our next president will not lack for intimate counsel on medical topics in his administration of the country. His father, Dr. George T. Harding, has been for many years a physician in Marion, Ohio, and a brother, Dr. George T. Harding, Jr., is a practicing physician of Columbus, Ohio. Perhaps we may hope for a scientific administration—if there is anything in heredity, we may reasonably expect one.

WE have learned that some of the county medical societies in Indiana do not hold meetings more than once or twice a year, and one of them in particular has not had a meeting since spring, though during that time a doctor has forwarded a transfer card for acceptance and is awaiting action before being accorded membership in the State Medical Association and the A. M. A. It seems to us that this is one phase of our organization scheme which deserves some change. No man should be kept out of the state and national medical associations solely and alone as a result of the failure on the part of some apathetic county medical society to hold meetings and accept credentials.

IN Butte, Mont., recently there was a convention of "chiropractors." This august assembly was addressed by one of its shining lights—Mr. Palmer of Davenport, Iowa, "the Fountain Head of Chiropractic." To the local newspapers Mr. Palmer explained:

"Our school back at Davenport is established on a business and not a professional basis," Mr. Palmer said. "It is a business where we manufacture chiropractors. They have got to work just like machinery. A course of salesmanship goes along with their training. We teach them the idea and then we show them how to sell it."

Commendably frank! They *do* work like machinery; from the eyebrows down. THE JOURNAL has always held that "chiropractic" is a trade and not a profession; Mr. Palmer's admission makes it unanimous.—*Jour. A. M. A.*, Nov. 6, 1920.

THE Michigan State Medical Association has beat us to it in the matter of providing for regional clinics to be held throughout the state in conjunction with county or district medical societies. However, Indiana has started the ball rolling and it is hoped that our educational committee will get busy. In Michigan clinical teams were selected, a captain being appointed for each team and he in turn selected the personnel of his team. As a rule the team is composed of internist, surgeon, laboratory man, roentgenologist and specialist. Several such teams are selected and each conducts a definite clinical program in each locality for which it is booked. The members of the county or district societies reimburse the team members for their traveling and hotel expenses, and bookings are made by the committee in charge. The subjects covered by the various teams are all of practical importance to the surgeon and general practitioner.

THE incoming governor made an ante-election promise that he would *not* approve any legislation that in the slightest degree lowers the present medical standards in Indiana, and he unqualifiedly stated that *he was not in favor of having more than one medical board to pass on the requirements of those who desire to treat Indiana's sick*. However, this doesn't mean that no effort should be put forth to prevent the passage of any chiropractic bill that has as its intent the lowering of our medical standards and the creation of a separate board to pass on qualifications of chiropractors. Some peculiar acts are staged in the name of politics, and it is just as well to count on the unexpected to happen unless radical measures are adopted to prevent. The incoming governor may be a man of his word and do all that he has promised, but we hope that the matter at issue will not go so far as to require his deciding vote to settle it.

FOR the first time in the history of the struggle to prohibit experiments on animals, a prohibition bill has been submitted to popular vote, and the antivivisectionists of the state of California were the propagandists. Following their usual routine, they gave wide circulation to grave misstatements of fact and reckless charges of wanton cruelty. Large amounts of money were contributed by eastern adherents to promote their cause, and newspaper space, posters and leaflets were used to the utmost. With limited means, the medical men of California and the university authorities put forth their

opposing claims, and, as stated by *The Journal of the A. M. A.* of November 13, it is greatly to the credit of the intelligence of the California voters that they saw through the falsehoods and misrepresentations of the antivivisectionists and registered their disapproval of the measure to abolish animal experimentation, at election time.

QUITE recently Indiana physicians again have been receiving circulars from the Walker Pharmacal Company concerning "Succus Cinceraria Maritima," which is sold as a "nonsurgical treatment of cataract and other opacities of vision." Many years ago we called attention through the columns of THE JOURNAL to the false and fraudulent claims put forth concerning the virtue of this preparation in "absorbing" various forms of cataract. Since then the government has seized a quantity of "Succus Cineraria Maritima," analyzed it and reported that the claims made for it "were false and fraudulent in that the same were applied to the article knowingly and in reckless and wanton disregard of their truth or falsity." The company entered a plea of guilty and was fined, but still they continue making similar claims to the medical profession and public. Two things are quite evident to us: first, that the federal punishment was not sufficiently severe and should be repeated in such force that future activities will be found too expensive; secondly, that there are enough doctors of the credulous type who support these frauds so well that the exploiters can afford to pay a federal fine occasionally and still be ahead of the game.

SECRETARY COMBS offers the following: A recent conference of state medical society secretaries brought out the fact that the dues of many of the large state medical associations are \$5 or more, whereas ours are \$4. Now it is no particular credit to have low dues, as the activities of our Association are always limited by our income, but this should be at least one incentive for the members to pay up promptly. The modest sum of \$4 should be given cheerfully to your county medical society secretary in advance as the by-laws require. In November there was mailed to each county medical society secretary a triplicate receipt book to aid him in collecting the dues. The members should insist on receiving the duplicate copy of this official receipt when the dues are paid so that there will be no question involving the county medical society secretary as to whether or not certain members have paid their dues. This is insisted on, as,

in spite of all these precautions, certain misunderstandings seem to arise every year, and the state medical society secretary is anxious to obviate any unpleasantness. Remember that the dues are the same for all members, even though they should not wish to take advantage of the medical defense, and that the dues are \$4 no matter what time in the year the member joins.

IT has been many years since "business" learned the value of combination, cooperation and concentration of effort. In spite of the abuses which have grown out of big combines the economic world is satisfied that such combinations reduce expense of production, distribution, and in a general way the duplication of effort. In a similar way the medical educational world awakened in the relatively recent past to the advantage to be derived from fewer—and better—medical schools. Isn't it high time for a similar movement in the matter of medical societies? With city, county, district, state, sectional, national and special societies it would be an easy matter for a man to spend half his time in attendance on one or another. Obviously, no man can afford any such percentage of his time regardless of the benefits to be derived therefrom. Accordingly, in an attempt to cover as much of the ground as he can he does little in any one society. In the aggregate there is a pitiful diffusion of effort, a tremendous waste of energy in going over similar ground in several different societies—and an almost insurmountable indifference on the part of the membership of all of them. Now is the appointed time! Fewer and better medical societies! Fewer meetings and a larger attendance! Let's stop begging the doctor to attend a multitude of meetings—let's give him so few and make them so good he can't stay away!

FEW doctors, even though they possess the necessary skill, can take the time and trouble necessary to prove up the claims made by manufacturers concerning new therapeutic agents. It was with a view to having these new preparations passed on by a competent and impartial court that led to the creation of the Council on Pharmacy and Chemistry of the American Medical Association. The doctor who does not follow the reports of the Council, which are published regularly in this Journal, is missing some valuable information, and is guilty of gross negligence if he does not obtain a report from the Council concerning any new therapeutic specialty before using it. No physician is justified

in accepting the recommendation of the manufacturer or exploiter without having the statements verified by an unbiased judge, and the Council on Pharmacy and Chemistry is not only the unbiased court of appeal, but is maintained at the expense of and conducted for the protection of the medical profession against the all too frequent misleading or fraudulent claims of manufacturers. Probably no single phase of the American Medical Association's work has been of such distinctive value to the medical profession, and incidently to the public, as the work of the Council. It not only has dealt with the supposedly legitimate preparations, but it has been the means of exposing worthless nostrums of every type, and quackery in all its forms.

THE JOURNAL has been forced to join the procession of publications of every class and raise the advertising rates. It is the first advance since THE JOURNAL was established twelve years ago, though during that time the cost of publication has steadily increased and during the last two years has gone up by leaps and bounds. Action was deferred as long as possible in the hope that there would be a change in conditions, but in the printing business the cost of paper not only has been steadily rising, but through shortage of material, gives every evidence of continuing high for many months to come and probably never will get down where it was even a year ago. Likewise, skilled labor in the printing business is being paid the highest wages known, and with labor unions closing one to three year contracts at the present wages, there is little chance of reduction through that period at least. In consequence of these conditions and the fact that THE JOURNAL is threatened with a large deficit at the end of the coming year if the present standard is maintained, it has become necessary to increase the income. Therefore, in order to meet the increased cost of production, THE JOURNAL advertising rates have been slightly increased. It is not expected that the increased rates will permit the accumulation of any surplus, but anything more than required to keep up the present size and standard of THE JOURNAL will be used in improvements.

THE William S. Merrell Company of Cincinnati is advertising Proteogens (of their manufacture) in the treatment of a large number of affections, among which are included cancer, rheumatism, tuberculosis, syphilis, gonorrhea, pneumonia, and influenza. In view of the fact that Indiana physicians are receiving through

the mails circulars recommending the use of these so-called Proteogens, we desire to remind our readers that the Council on Pharmacy and Chemistry made a report in *The Journal of the A. M. A.* of July 12, 1919, from which we quote as follows: "It is difficult to give serious consideration to a set of alleged remedies when the only evidence is that furnished by the proponents of the alleged remedies. This is particularly true when the alleged remedy does not make a sufficient appeal to one's sense of the rational in therapeutics to lead one to feel justified in asking a trial at the hands of careful clinical observers. Considering the grave nature of the diseases for which Proteogens are recommended, particularly cancer, tuberculosis, and pernicious anemia, the want of a rational basis for the method of treatment, and the general tenor of the advertising matter, it appears safe to conclude that these agents do not represent any definite advance in therapeutics. As the use of preparations, secret in composition, and of no established value, is contrary to rational therapy, it is recommended that the Proteogen preparations be in conflict with rules 1, 6 and 10."

THE chiropractors say that in the coming session of the legislature they propose to secure legal recognition of their cult through the establishment of a special examining board. If so it will be because the members of the regular medical profession are asleep. Now is the time for a little missionary work, and every single regular medical practitioner in the state of Indiana ought to make it his business to have a personal interview with the senators and representatives from his immediate vicinity and point out the fallacy of the chiropractic demands. The law makers should be given to understand that we are not asking for the protection of the regular medical profession but that we are asking for protection of the public from the practice of incompetents, and that all we ask is that every one who desires to treat the sick shall comply with the same legal requirements. To permit the chiropractors to treat the sick in Indiana on any other basis than that required of other persons who are permitted to treat the sick would be class legislation of the rankest sort. Our present medical law is none too stringent, and does not require any one to practice any special school of medicine, but it does require that each and every one who professes to treat the sick shall possess a certain amount of general education and be reasonably familiar with the fundamental branches which

have to do with the human body in health and disease. The law is fair, eminently just, and should be upheld. These facts should be pointed out to the incoming senators and representatives, and they should know that we have no quarrel with the chiropractors because of their peculiar form of treatment, but rather because they choose to place a premium on general ignorance and especially incompetence in the knowledge of the cause and diagnosis of disease.

DEATHS

CHARLES C. MORRIS, M.D., died at his home in Rockville just before the recent election. He was graduated from the Jefferson Medical College of Philadelphia in 1876.

LOGAN STANLEY, M.D., died at his home in Roachdale, November 1, from uremia. He was graduated from the Indiana Medical College in Indianapolis in 1876 and was 74 years of age.

SAMUEL M. BARTLETT, M.D., died suddenly on September 30, at his home in Kokomo, aged 56 years. He was graduated from the Physio-Medical College of Indiana, Indianapolis, in 1904.

JOHN S. DUKATE, M.D., Alfred, died November 18, aged 95 years. He was graduated from the University of Louisville in 1845 and served in the Union Army of the Civil War as a surgeon.

RICHARD C. MCCAIN, M.D., died October 10, at his home in Kentland, aged 68 years. Death was due to cardiac failure. Dr. McCain was graduated from the Louisville Medical College in 1875.

MRS. INDIA M. GARD, wife of Dr. Oliver Gard of Frankfort, died November 4, as a result of injuries incurred when struck by an automobile on the preceding day. She was 70 years of age and was struck while on the way to the hospital to visit her husband.

GRANVILLE REYNARD, M.D., died at his home in Union City, November 26, from apoplexy. He was graduated from the Medical College of Ohio, Cincinnati, in 1881, and was a member of the Randolph County Medical Society, the Indiana State Medical Association, and the American Medical Association.

GEORGE H. HOSKINS, M.D., Whiting, died November 3, following an operation, aged 48 years. He was graduated from Northwestern University School of Medicine, Chicago, in 1889. He was a member of the Lake County Medical Society, the Indiana State Medical Association, and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *The Journal of the Indiana State Medical Association*. Patronize these advertisers for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. E. M. SWEET has recently purchased the National Sanitarium, Martinsville, at a price of \$50,000.

DR. AND MRS. J. L. WARVEL, North Manchester, have been spending a short vacation in Alabama.

DR. I. W. LAWSON, formerly of Wolcottville, has removed to Kendallville for the practice of medicine.

THE proposition to erect a \$100,000 Tipton County Hospital was defeated at a special election by 800 votes.

DR. ANITA M. MUHL, Indianapolis, left November 11 to assume duties at St. Elizabeth's Hospital in Washington, D. C.

DR. ROY MORROW, Connersville, sustained two broken ribs and a fractured ankle in an automobile collision on November 12.

DRS. J. P. WILSON, J. H. WALKER AND W. L. McCLAIN of Scottsburg have become associated for the practice of medicine.

DR. ALBERT C. CHENOWETH, Andrews, has removed to Bluffton to become associated with Dr. C. E. Caylor in the practice of medicine.

THE Nobel prizes in medical science for 1919 and 1920 have been awarded to Dr. Jules Bordet of Brussels and Prof. August Krogh of Copenhagen.

NEW HOSPITAL.—A \$95,000 hospital is to be erected in Greencastle, as the result of an election in which the bill was passed by a majority of 1,195 votes.

DR. JOHN HICKMAN, Bluffton, who was commissioned captain a few weeks ago in the Regular Army, is now located at Fort Bliss, San Antonio, Texas.

SURG.-GEN. M. W. IRELAND, U. S. Army, has been appointed a member of the Council on Medical Education of the American Medical Association to succeed the late Dr. Isador Dyer, New Orleans.

MISS MABEL SHUTT, who has been superintendent of the Schneck Memorial Hospital in Seymour for several years, has recently removed to Bluffton to become superintendent of the Wells County Hospital.

A HOSPITAL, at the estimated cost of \$3,000,000, is to be built for the benefit of the Police Department of New York City. The building will be one of the largest and best equipped hospital buildings in Greater New York.

THE Indianapolis city board of health has recently adopted a resolution requiring the entire staff of the City Hospital, composed of about 150 persons, to meet the last Friday evening of each month to discuss hospital problems.

THE regular meeting of the Bartholomew County Medical Society was held in Columbus, November 9 with a good attendance and an enthusiastic meeting. The next regular meeting will be held the second Tuesday in December.

DR. FRANK B. WYNN of Indianapolis was one of the principal speakers at the recent meeting of the Southern Medical Association which convened at Louisville, Ky., using for his subject "Culture and Character in the Modern Physician."

THE annual meeting of the Eighth District Medical Society was held in Muncie on October 22. The meeting was attended by about 100 physicians and a fine scientific program was carried out. The conference closed with a banquet at the Kirby Hotel.

A NEWSPAPER report states that a trap has been set for physicians and brewers who violate the Volstead act. A special water-marked paper on which prescription blanks are to be printed has been decided on, as many counterfeit prescription blanks have been discovered.

TYPHOID fever has appeared in epidemic form in Salem, Ohio. The city has a population of less than 10,000 and a recent report showed 780 persons suffering from the disease. Several emergency hospitals have been opened but the little city is badly in need of relief and has made an appeal to the American Red Cross for help.

THE Bureau of Economic Research, which was organized last February in New York City by private enterprise, opened offices on Sept. 1, 1920, with William T. Foster, M.D., formerly president of Reed College, as director. There will be complete freedom for the publication of the results of the research conducted by this Bureau.

A CASE of leprosy has been discovered in Indianapolis according to a report from the board of health of that city. The victim is reported to have become infected while in military service during the Spanish-American War when he was stationed in the Philippine Islands. No doubt the case will be referred to the national leprosorium in Mississippi.

At the forty-seventh annual meeting of the Northern Tri-State Medical Association which was held at the Anthony Hotel, Fort Wayne, October 26, the following officers were elected for the coming year: President, Dr. Louis J. Miller, Toledo; vice president, Dr. Floyd E. Radcliff, Bourbon; secretary, Dr. C. W. Haywood, Elkhart; treasurer, Dr. A. J. Weitz, Montpelier.

At the recent election in the state of California four so-called "medical measures" were defeated. These measures were: The antivivisection bill, the antivaccination measure, the bill for the creation of a separate chiropractic board and the efforts of the osteopaths to secure the right to prescribe drugs. This is one of the first instances in which medical questions have been submitted to popular decision.

DR. J. N. HURTY, secretary of the state board of health, at a mass meeting in Lafayette, discussed the public health situation in America, making the statement that America was fifteen years behind Japan in this respect. He urged the procuring of an all-time public health officer and the appropriation of sufficient money from the legislature and county governments to carry on public work on a proper scale.

DURING November the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

L. A. Van Dyk: Benzyl Benzoate; Benzyl Benzoate 20 per cent.; Benzyl Benzoate 20 per cent. Aromatic.

The Heyden Chemical Co.: Vargol.

Intra Products Co.: Benzyl Alcohol; Ven Sterile Solution Benzyl Alcohol.

DR. GEORGE BLUMER, formerly dean of the faculty, has accepted a temporary appointment as clinical professor of medicine at Yale Medical School. Dr. Wilder Tilleston of New Haven has been named assistant to Dr. Blumer, and Dr. Edward H. Hume, dean of the medical school of Yale-in-China, home on leave of absence, will serve as visiting professor of medicine. Dr. John E. Lane and Dr. Alfred G. Nadler have been appointed clinical professors of dermatology.

THE St. Joseph County Medical Society held its thirty-fifth annual meeting Wednesday, November 17, in the K. of C. Hall, Mishawaka. The following program was carried out: "The Clinical Signs of Peripheral Nerve Lesions," Lewis J. Pollack, Chicago; "Some Recent Advances in the Diagnosis and Treatment of Renal Disease," J. L. Miller, Chicago; "Some Phases of the Use of Radium in Gynecology," A. L. Curtis, Chicago; "General Principles," William E. Quine, Chicago.

THE *American Journal of Obstetrics and Gynecology*, of which the first issue has just come from the press, succeeds the former *American Journal of Obstetrics and Diseases of Children*, and represents the American Gynecological Society, The American Association of Obstetricians and Gynecologists, and the obstetric societies of New York, Philadelphia and Brooklyn. The journal makes a good appearance and should well fill the special need for which it was created.

THE National Committee for Mental Hygiene has been invited by Gov. Frederick D. Gardiner of Missouri to undertake a survey of the conditions of the feeble-minded in that state with a view to ascertaining the expense of their neglect and what economies can be effected by the training and custody of such persons. The survey is under the jurisdiction of Dr. Thomas H. Haines

of Columbus, Ohio, who has made similar surveys for the Committee in Kentucky, Tennessee, Alabama and Missouri.

THE Indianapolis Ophthalmological and Otolaryngological Society has recently been organized by the physicians in Indianapolis limiting their practice to diseases and surgery of the eye, ear, nose, and throat. The following officers were elected for the first year: W. E. Wright, president; T. C. Hood, vice president, and F. V. Overman, secretary-treasurer. The purpose of this society is to promote a better and closer social spirit as well as the professional betterment of its members.

AT the twenty-first annual meeting of the Ohio Valley Medical Association held in Evansville, November 10, the following officers were elected: Dr. C. T. Souther, Cincinnati, president; Dr. L. W. Bremerman, Chicago, first vice president; Dr. Sidney Eichel, Evansville, second vice president; Dr. L. L. Solomon, Louisville, third vice president; Dr. B. L. W. Floyd, Evansville, reelected secretary and treasurer. *The Cincinnati Journal of Medicine* was chosen as the official organ of the Association.

A NEW government hospital has recently been opened at Perryville, where the United States Public Health Service will provide special care and treatment for shell shocked soldiers. Over 100 patients were transferred from the temporary hospital at Cape May, N. J. In addition to the main hospital building, there are numerous individual cottages where special care and a homelike environment can be provided where necessary. At the present time the Public Health Service has under treatment over 12,000 discharged soldiers suffering from shell shock and other mental disorders.

AT the 106th semi-annual meeting of the Union District Medical Association, held Thursday, October 28, at Rushville, the following scientific program was carried out: "The Union District Medical Association and Some Things in Medicine Occurring in Half Century," J. N. Study, Cambridge City; "Diagnosis of Tuberculosis," Stephen C. Markley, Richmond; Lantern Slide Demonstration of Heart Irregularities and Their Clinical Significance, J. E. Greiwe, Cincinnati; "Lethargic Encephalitis," C. F. New, Indianapolis; "The Present Status of Tonsil and Adenoid Surgery," John F. Barnhill, Indianapolis.

THE Twelfth District Medical Society held a meeting at the Anthony Hotel, Fort Wayne, November 10. The following scientific program was carried out: "Early Clinical Manifestations of Renal Disease," W. E. Smith, Decatur; "Physiotherapy and Its Practical Application to Clinical Medicine," W. W. Carey, Fort Wayne; "The Comparative Value of the Newer Methods in the Wassermann Test and the Interpretation of Results in 1,600 Cases," B. W. Rhamy, Fort Wayne; "Traumatic Surgery of the Extremities," H. O. Bruggeman, Fort Wayne; "When Weaning Is a Crime," L. P. Drayer, Fort Wayne; "Subcutaneous Injuries to the Liver," J. W. Thomson, Garrett.

DR. ISADORE DYER died on October 12 at his home in New Orleans, aged 55 years. Death was due to angina pectoris. He was graduated from the Tulane University of Louisiana School of Medicine at New Orleans in 1889. He was a member of the Orleans County Medical Society, the Louisiana State Medical Association, and the American Medical Association. He had formerly been president of the Association of American Medical Colleges, a member of the Council on Medical Education and Hospitals of the American Medical Association, a member of the National Board of Medical Examiners, and Dean of the Tulane University Medical School. He served as a Major in the Medical Corps of the Army during the World War, and on his discharge was commissioned a Colonel in the Medical Reserve Corps of the Army.

SOCIETY PROCEEDINGS

100 PER CENT. CLUB

Open to all county secretaries. Initiation fee: Securing enough new members this year to replace last year's deaths and removals.

No.	County	Secretary	Date
1.	Decatur	C. R. Bird	Feb. 1, 1920
2.	Fayette	R. H. Elliott	Feb. 1, 1920
3.	Franklin	E. M. Glaser	Feb. 1, 1920
4.	Fulton	A. E. Stinson	Feb. 1, 1920
5.	Jasper-Newton	O. E. Glick	Feb. 1, 1920
6.	Jefferson	O. A. Turner	Feb. 1, 1920
7.	Marshall	Harry Knott	Feb. 1, 1920
8.	Posey	John Ranes	Feb. 1, 1920
9.	Shelby	F. E. Bass	Feb. 1, 1920
10.	Sullivan	J. B. Maple	Feb. 1, 1920
11.	Union	J. D. Shonwald	Feb. 1, 1920
12.	Warrick	J. F. Samples	Feb. 1, 1920
13.	Washington	Claude B. Paynter	Feb. 1, 1920
14.	Wells	G. B. Morris	Feb. 1, 1920
15.	Whitley	H. M. Ego	Feb. 1, 1920
16.	Delaware-Blackford	H. D. Fair	March 1, 1920
17.	Hancock	C. H. Bruner	March 1, 1920
18.	Knox	D. H. Richards	March 1, 1920

19.	Madison, Doris Meister.....	March 1, 1920
20.	Monroe, J. E. P. Holland.....	March 1, 1920
21.	Scott, J. P. Wilson.....	March 1, 1920
22.	White, H. B. Gable.....	March 1, 1920
23.	Marion, Leslie H. Maxwell.....	April 1, 1920
24.	St. Joseph, R. B. Dugdale.....	April 1, 1920
25.	LaGrange, A. J. Hostetler.....	April 1, 1920
26.	Miami, M. L. Wagner.....	April 1, 1920
27.	Steuben, Mary Ritter.....	April 1, 1920
28.	Tippecanoe, W. M. Reser.....	April 1, 1920
29.	Wabash, L. O. Sholty.....	April 1, 1920
30.	Fountain-Warren, A. M. Sullivan....	May 1, 1920
31.	Henry, W. H. Stafford.....	May 1, 1920
32.	Jay, C. A. Paddock.....	May 1, 1920
33.	Montgomery, A. L. Loop.....	May 1, 1920
34.	Vanderburgh, William E. Barnes....	May 1, 1920
35.	Bartholomew, H. H. Kamman.....	June 1, 1920
36.	Dearborn-Ohio, E. J. Libbert.....	June 1, 1920
37.	Huntington, F. B. Morgan.....	June 1, 1920
38.	Vigo, W. D. Asbury.....	June 1, 1920
39.	Clarke,	July 1, 1920
40.	Clinton	July 1, 1920
41.	Kosciusko	Sept. 1, 1920
42.	Lake County, E. E. Evans.....	Oct. 1, 1920
43.	Noble County, H. O. Williams.....	Oct. 1, 1920

This constitutes the final list for the year 1920, and the fact that we have increased our membership over last year evidences the success of the members of the club. Not to be content with the present success, we will start next year the 110 per cent. Club as we will need that much of an additional gain to encompass all the members that should be in the Indiana State Medical Association.

INDIANAPOLIS MEDICAL SOCIETY

October 5, 1920

The first meeting of the year was called to order by the president, Dr. James H. Taylor. The minutes of the previous meeting were read and approved.

Drs. B. M. Gundelfinger, R. A. Solomon and E. L. Lingeman were elected to membership in the society. The applications of Drs. C. E. Cox, Thomas B. Johnson, N. R. Byers and L. L. Shuler were read the second time and referred to the Council. The applications of Drs. George S. Reitter, W. D. Little, J. William Hoffman, B. A. Thompson, Jacob Paskind and H. L. Magennis were read for the first time.

A letter from the Indianapolis Public Library was read inviting the members to the Riley Day Celebration Thursday, October 7.

A letter from the Decatur County Medical Society was read in which cooperation was solicited in ascertaining the attitude of the legislative candidates toward educational legislation; and whether, if elected, they would support measures to maintain present standards in medical practice and work to defeat measures calculated to lower the present standards of medical practice. Also whether or not they favor finance measures to support the state board in its efforts to enforce the law in suppressing illegal practice. Dr. Cregor moved that the local society go on record as favoring the ideas set forth in the letter from the Decatur County Medical Society. Seconded and passed.

The personnel of the committee appointed by the president during the summer intermission was announced as Drs. F. W. Cregor, M. N. Hadley and J. W. Ricketts.

Program.—Address: "Leprosy in Our Country," Dr. A. W. Stillians, Chicago.

Abstract.—Leprosy, one of the oldest medical problems and still a problem of today. A new interest has been aroused in it of late. It was introduced into America from Europe soon after the discovery of Columbus. The first mention in the literature was in a history of Florida and Carolina published in 1775. The first isolation house in New Orleans was established in 1786. It was introduced later into Minnesota by the Scandinavians, into Texas by the Mexicans, and into the Pacific coast states by the Chinese. Every large city has a few cases. The whole number in the United States was estimated in 1901 to be about 530. Is larger now. Our section of the country has few cases, considering the opportunities for importation. Only six cases admitted into Cook County Hospital in the past eight years.

The effort to prevent leprosy began in earnest over a thousand years ago but has not succeeded in eradicating it even in Europe because of impossibility of making an early diagnosis. Incubation stage is from two to five years, stage of prodromes also several years in duration. The only possibility of diagnosis during this time is by examination of pulp of lymph glands as in syphilis. Positive diagnosis in laboratory made by staining for bacilli specimens of nasal mucus, sputum, feces, blood, sections of skin or of nerves. Characteristic acid fast bacilli in clumps. Excretion of bacilli can be increased by iodides, but great care must be exercised for very small doses sometimes cause severe reactions. The Wassermann reaction is of slight value.

The clinical diagnosis difficult in the prodromal stage, can be made in the macular stage, and is usually easy in the later nodular or maculo-anesthetic stages. Atrium of infection not yet determined. May be through respiratory tract or through skin, like syphilis. The disease is best prevented by cleanliness and isolation. The general use of soap said to have been an important factor in restraining the disease in Europe during the Middle Ages. Strict isolation also effective. Isolation hospitals must afford an out of door life and pleasant employment during the long course of treatment. Hope that the government hospital may be established soon.

Chaulmoogra oil the most effective drug. The new derivatives, the sodium salts of the fatty acids, prepared by Rogers, which can be given by mouth, intramuscularly or intravenously, and the ethyl esters prepared by Dean, which are given intramuscularly, are much better than the oil. The prognosis even with the oil alone is not bad.

Statistics from the Louisiana Leper Home for 1918 and 1919 give thirteen cases discharged as clinical cures and six more ready for discharge, among 106 who remained in the institution for treatment. Hollman and Dean report eight clinical cures among twenty-six cases treated for two years with the ethyl esters. Rogers says that 50 per cent. of the early cases and 25 per cent. of the advanced cases can be brought to a clinical cure.

Leprophobia also an old disease. The new hope for cure of the leper and the fact that it is not easily contagious should be explained to the laity. The nursing of leprosy is a life of the most unselfish devotion. Those who undertake it deserve our highest praise.

Discussion.—Dr. A. W. Brayton: Own experience with lepers limited. Examined many cases at the Lepers' Home in New Orleans in company with Dr.

Schamberg. The Mississippi Valley is remarkably free from this disease. Has treated two cases. One was a Southern woman and the other a man who had traveled in the southern states and South America.

Dr. George Wells: When stationed in Porto Rico, 1898-1900, made a survey of island and found about 125 lepers. Two islands off San Juan were selected as a spot of isolation and hospital erected. Visited hospital each week, while the native doctor made daily rounds. The pictures shown by Dr. Stillians are typical of the cases I have seen. Visited about 1,500 lepers in Hawaii. More care in Hawaii than any other place. In Philippines 4,500 cases scattered over the islands were finally isolated on a separate island. Leprosy has decreased greatly owing to the segregation.

Dr. F. W. Cregor: I have seen only a few cases. One of these was in Politzer's Clinic and the man was from South Africa. Leprosy is a granuloma much as syphilis and tuberculosis. It is a slow process and is generally lighted up by some acute infection. Period of incubation is indefinite, ranging from two to forty years.

Dr. A. L. Walters: Very much interested in the chaulmoogra oil treatment now being given intravenously. This has run the same course as cinchona in malaria, mercury in syphilis, ipecac in amebic dysentery. These treatments were first given by mouth, then hypodermically and at last intravenously. The fatty acids of chaulmoogra oil and cod liver oil are indicated in leprosy and tuberculosis, respectively. Sodium morrhuate intravenously in tuberculosis has been used with some success.

Dr. F. B. Wynn: Saw five cases in Vienna, General Hospital. Four in young persons. The Vienna school at that time took the position that there was no danger of contagion. Would be much interested in hearing from Dr. Stillians what the present attitude of the Vienna school is on this question.

Dr. Fletcher Hodges: Is this disease found in the new-born? Is it hereditary?

Dr. Stillians, closing: When I was in Vienna there were no lepers in the hospitals. The attitude of the doctors was that leprosy was contagious. The same is true of Paris. Leprosy generally comes after birth just as any other infection.

Meeting adjourned. Attendance 80.

L. H. MAXWELL, Secretary.

October 12, 1920

The meeting was called to order by the president, Dr. James H. Taylor. The minutes of the previous meeting were read and approved.

The application of Drs. J. E. Holman and Robert E. Conway were read for the first time.

There being no further business the society proceeded to the program of the evening.

Program.—Paper: "An Unusual Case of Rupture of the Gallbladder," Dr. K. R. Ruddell.

No abstract submitted.

Discussion.—Dr. E. D. Clark: I do not believe a stone can pass through the wall of the gallbladder or duct without that the wall is gangrenous. Pressure causes ischaemia and softening and with infection in addition the walls are so changed that the stone easily passes through. The sudden death in Dr. Ruddell's case is difficult to understand. Usually some dangerous illness of eight or ten months before leaves a bad heart or kidneys and therefore the risk is not

good and the resistance lowered. Many infections are blood borne and gallbladder infection is oftener from some other focus rather than from the intestines. The most important point is thorough drainage. Many believe that cholecystectomy is the best procedure. Gallbladder surgery is unsatisfactory to a certain extent, no matter what the treatment. Judd says that some recurrences are due to remaining infections in the biliary passages. Many return with symptoms due to pancreatitis and cholangitis.

Dr. J. H. Eberwein: Early diagnosis of utmost importance. In most acute abdominal conditions the patient cannot move without discomfort. After rupture of the gallbladder patient moves with less pain than in other acute abdominal conditions. Some cases have been cured by aspirating bile from abdominal cavity. In some cases gallbladder may be sutured. The gallbladder will stand a great deal of pressure before rupturing. Traumatic ruptures are easier to deal with because the gallbladder is usually normal and without infections.

General Discussion.—Dr. O. G. Pfaff: This is the first time in several years that this subject has been presented. It is well to bring this condition to mind as a possibility in our diagnoses. It is rather rare and we may easily overlook it.

Dr. H. O. Pantzer: Has had three cases: 1. A woman with a virulent typhoid fever. Operation showed a gangrenous gallbladder with pus and bile in the abdomen. 2. Patient had been operated for gallstones. Following recovery had eaten inordinately and had a recurrence of acute pain. Operation showed gallbladder torn loose from liver. Suturing followed by recovery. 3. Patient who had vomited gallstones. Operation showed the gallbladder attached to the stomach and a rupture through the walls. Etiologically an anatomical irregularity is the basis for this condition.

Dr. K. R. Ruddell, closing: There was no history of influenza or pneumonia in this case. Patient was well nourished and healthy. Had mild jaundice for three or four days. The chief question in my mind was what caused the rupture. I have no doubt that Dr. Clark's theory of the ischemia of the gallbladder wall is correct but there was practically no evidence of any infection or other trouble.

Meeting adjourned. Attendance 60.

L. H. MAXWELL, Secretary.

October 19, 1920

The meeting was called to order by the president, Dr. James H. Taylor. The minutes of the previous meeting were read and approved.

The application of Dr. Emery D. Lukenbill was read for the first time. Drs. Lacy L. Shuler, Thomas B. Johnson and Norman R. Byers were elected to membership in the society.

Program.—Paper: "Intracranial Hemorrhage in the New-Born with a Report of Three Cases," Dr. Louis H. Segar.

Abstract.—Intracranial hemorrhage in the new-born may be the result of trauma or a manifestation of hemorrhagic disease. In either case in addition to recognition of the symptoms of the disease, spinal puncture with withdrawal of bloody fluid is necessary to diagnosis. A determination of the blood's clotting time is also important. Treatment should be by repeated spinal punctures and the administration of whole blood subcutaneously except in those cases

where there are localizing symptoms, in which case operative interference is advisable.

Paper: "Upward and Forward—A Peculiar Presentation," Dr. A. S. Jaeger.

No abstract submitted.

Discussion.—Dr. J. C. Carter: The practice of giving whole blood in cases of true intracranial hemorrhage of the new-born is Dr. Brady's of St. Louis. He urges the early diagnosis of this condition by spinal puncture and the immediate subcutaneous injection of blood in order to prevent the formation of a clot and the subject symptoms.

Dr. W. H. Foreman: Dr. Jaeger's paper is difficult to discuss, but there are several excellent thoughts worthy of our consideration. It suggests: 1. Insufficient care in diagnosis and proneness to apply the remedy without due consideration. 2. Too much specializing without broadened perspective. In other words, no summation of opinion. Must remember that we are not only treating the disease but the patient as well. Dr. Jaeger's burlesque on consultations suggests the three classes of consultants: 1. The one who pats the attending on the back and agrees with everything being done. 2. The one who desires to force his fad or "hobby" on the doctor and patient. 3. The consultant who is constructively critical, who attempts to be of some real service. We seek to be too learned and forget the common and sensible things. Too many details which mean nothing. Too much interference. Let Nature alone.

General Discussion.—Dr. Jobes: Field of intracranial hemorrhage bound to be greater in future than past. Mercury manometer needed. Normal spinal fluid pressure in infant 4 to 8 mm. In these cases 12 to 20 mm. If pressure is not above 15 mm. drain 6-10 c.c. of spinal fluid. If more than 15 mm. do decompression. In a recent series of 2,000 cases of spastic paralyses, ages 6 to 24, 350 cases, or 16 per cent., were traced to birth hemorrhage.

Dr. J. V. Reed: The pediatricians appear to be somewhat slow in calling surgeons for these conditions. Generally better to lay down the whole parietal flap in order to have more room to work. The operation is a very simple one because of the parchment like bones of the infant.

Dr. Jane Ketcham: Reported a forceps case with face presentation which had meningeal screaming, convulsions and coma. Smoothing out the compressed parietal bones by operation the third day after delivery relieved the spasticity in a few days.

Dr. C. D. Humes: Idiocy and feeble-minded conditions arise from intracranial hemorrhage in the new-born. Do a widespread decompression. Laying open both sides will not add to the mortality.

Dr. H. F. Beckman: Believes we are receiving the wrong idea concerning decompression. Doubts whether children who were blue, had nystagmus, would not nurse, were screaming and some of the various other symptoms mentioned, died of intracranial hemorrhage. Must lay stress on evidence of pressure which does not subside on repeated spinal puncture.

Dr. John Cunningham: Some cases, such as Dr. Segar mentioned, do very well for the time but have bad effects later. It would be interesting to hear a report a year from now. Has had two cases (1) a forceps case. Had twitching of extremities. Decompression done. Good recovery. When time to walk developed spastic paralysis of arm and leg. (2) Case died on third day while preparing for operation. Was

impressed with some points in Dr. Jaeger's paper. Experience is most important and begets judgment. Remember you are dealing with a person and do not forget the personal equation. This is a weak point in the big clinics.

Dr. G. B. Jackson: Many birth injuries are preventable. May be classed as relative disproportion cases. Some medical treatment can be used. Bromids and even ice will help in cerebral irritation.

Dr. Segar, closing: I evidently failed to make the point I desired. There are two classes of intracranial hemorrhage. Those due to (1) trauma, and (2) spontaneous tendency to bleed. In this latter type we have bleeding all over the body. It was of the spontaneous type in the new-born that I talked.

Meeting adjourned. Attendance 75.

L. H. MAXWELL, Secretary.

October 26, 1920

The meeting was called to order by the president, Dr. James H. Taylor. The minutes of the previous meeting were read and approved.

The application of Dr. H. W. Corya was read for the first time.

Dr. F. W. Gregor, chairman of the special legislative committee, reported that all but a few of the candidates for the legislature had been seen and without exception expressed sentiments friendly to the medical profession and against legislation for special cults.

The following resolution of Dr. Wishard's was read:

WHEREAS, In the present political contest for the office of chief executive of the state of Indiana, some doctors by their over-zealous activities, have created a wrong impression in many medical centers (as evidenced by several inquiries) that the medical profession as an official body had allowed itself to become involved in party politics; and

WHEREAS, The public should know that the medical profession is not interested in party politics; therefore be it

Resolved, That the Indianapolis Medical Society go on record as not favoring either candidate, but granting to its members the right to vote as they please; and be it further

Resolved, That we declare our faith in the fact, that the interests of the medical profession in legislative matters will be in equally safe hands by the election of either; be it further

Resolved, That the Secretary of this Society be instructed to send a copy of these resolutions to Dr. C. B. McCulloch and Warren T. McCray.

Dr. Ralph Chappell moved that action be indefinitely postponed. Seconded. A rising vote was called for and showed twenty-two ayes and eighteen noes. Action thereby indefinitely postponed.

Program.—Paper: "Bilateral Tubal Pregnancy with Rupture on One Side," Dr. Frank E. Abbott.

Abstract.—The paper opened with a discussion and description of the pathology of tubal pregnancy. Mention was made of the possibility and frequency of changes in the other tube with tubal pregnancy on one side. Report of Stein's article on the frequency of ectopic gestation in 580 cases of gynecologic operations showing 7 per cent. of these cases showed evidence of ectopic gestation was brought out. Mention was made of McCalla's paper on "Bilateral Tubal Pregnancy" in which he reported thirty-seven cases, including one of his own. To the writer's knowledge,

there have been no other cases of bilateral tubal pregnancy reported from the local societies. Following was a case report with detailed description of the symptoms, treatment, operation and findings in a case of bilateral tubal pregnancy with rupture of one side, which came under the writer's treatment recently. Microphotographs of the specimens were shown revealing the presence of placental tissue in both tubes. A laboratory report from Dr. Warvel substantiated these findings. Also photographs of the gross specimens showing the ruptured tube and unruptured tube were shown, also photograph of the unruptured tube after it had been opened showing a six to eight weeks fetus. Conclusions of the paper emphasized and urged the importance of close observation of the gravida, especially the careful clinical study of abnormal symptoms of early pregnancy. Care in vaginal examination in cases of suspected tubal pregnancy in order to prevent rupture. Early diagnosis and immediate operation essential in tubal pregnancy.

Paper: "Indications for Tonsillectomy and Adenoidectomy," Dr. John W. Carmack.

Abstract.—The purpose of this paper is to emphasize the principal local indications calling for tonsil and adenoid removal. Tonsils and adenoid that are not obstructive or infected should not be removed, but a pathologic tonsil or adenoid should be removed before secondary pathology occurs. In children, one or more attacks of tonsillitis, persistent cerbical adenitis, adherent tonsils or hypertrophied tonsils and adenoid sufficiency to produce continued nasal irritation by obstruction, are the chief indications. The appearance in the throat surface cultures and age are of secondary importance. In adults the symptoms may be pronounced, but in the majority of cases the indications for tonsillectomy are less obvious, consisting of mild sore throat, which occurs particularly in the morning, tenderness in the tonsil itself and in the deep cervical glands which lie under the middle of the sternomastoid muscle, a continued redness of the tonsil pillars and surrounding tissue and firm adherent tonsils. The case history is one of the most important factors in making a diagnosis. A careful history or examination will prevent overdoing throat surgery and on the other hand, prevent many secondary infections from foci in the tonsils and adenoid.

Paper: "Radium in Gynecology," Dr. T. C. Kennedy.

Abstract.—The Wertheim operation for cancer of the cervix uteri is not available in the majority of such cases because of its difficult technic; moreover, when properly performed the mortality is very high and the disastrous sequelae are many. The Percy cautery method offers a better form of treatment, but the results have not reached the expectations of the author. Cancer of the cervix being so frequent, a treatment must be had which can safely be used by the average operator. With radium we have a method whereby a greater percentage of these cases can be relieved or even cured than has been done with surgery or any other method. Every case of cancer of the cervix is a radium case and the earlier it is treated the greater are the chances for success. Those surgeons experienced in the use of radium are limiting more and more the scope of operability in almost all malignant lesions. Much can be accomplished by radium in the treatment of uterine fibroids in properly selected cases. Contraindications are enumerated. In

profoundly anemic patients with persistent hemorrhage radium may always be applied for the hemostatic action regardless of the cause of the metrorrhagia.

Discussion.—Dr. C. E. Ferguson: Dr. Abbett's paper teaches us one very important point. On diagnosis of ruptured ectopic pregnancy operate immediately, even though there is a tendency to recover from the shock. Some cases of ruptured ectopic recover without operation. Recalls two cases of his own which refused operation and got well. I disagree with the doctor, however, when he says the diagnosis of this condition is easy. It is not always so. Gall-bladder colic, intestinal obstruction, ovarian twisted pedicle and other conditions in the pregnant woman have been mistaken for ectopic.

Dr. A. C. Kimberlin: The tonsils were long neglected and now they are overestimated. I saw my first tonsil cases in London in 1909. An incredible number were being done. The same conditions now prevail in our own hospitals. Tonsillectomy even by experienced men does not always mean success. Small amounts of tissue left on the outskirts of the tonsils following operation produce harm and secondary symptoms. Tonsils ought not always be removed on account of adenitis. It is important to correctly interpret the secondary symptoms.

Dr. George W. Kohlstadt: The main consideration in radium treatment of carcinoma is to get the case early. Generally these cases come for radium after the surgeon has refused to operate. Radium alleviates the pain, stops hemorrhage and gets rid of the bad odor. We have not had our cases under observation long enough to speak of cures.

General Discussion.—Dr. R. C. Beeler: At the recent meeting of roentgenologists Dr. Coolidge of Coolidge tube fame, mentioned improvement made in apparatus so that filtering the roentgen ray through copper and with a 15 inch spark gap the same ray is obtained as is found in radium. Of course the roentgen ray will not supplant radium because the latter is more convenient for small cavities. However, in the broad ligament, for example, the roentgen ray would be superior. The results of Bèclère of Paris with roentgen ray in treating fibroids has been very gratifying. He had of course selected cases and gave massive doses. He has been doing this for about twelve years. The treatments are so controlled that they do not produce an artificial menopause as formerly.

Dr. Thomas B. Noble: Sorry not to see the gross specimen. Some doubt as to double pregnancy in the absence of fetal structures on side of ruptured tube. On account of the hemorrhagic condition this might have been a ruptured hematosalpinx. In reference to tonsils it seems there are two reasons for removal of tonsils. They are large or they are submerged, and in either case should be removed. As to Dr. Kennedy's paper "We must hew to the line." I have sent eight cases to Dr. Kennedy for treatment, including cancer of stomach, uterus, neck and some others. No benefit resulted from the treatment and they are all dead. There is a remedy which has withstood the test of time, namely, the "aseptic scalpel." Surgery is the undefeated enemy of carcinoma. Dr. Kennedy reports many cases benefited but does not mention the hundreds of cases unbene- fited and dead.

Dr. A. S. Jaeger: Believes that vast majority of cases diagnosed and operated up to fifteen years ago as uterine carcinoma were not such. Many of those cases were syphilis. Many cases treated by radium and not showing results were probably syphilitic.

Dr. J. William Wright: There are two reasons for tonsillectomy: 1. Large and obstructive tonsils. 2. Clearly demonstrated secondary infections. The acute cases of neuritis and rheumatism are benefited and generally cured. In the chronic cases we may or may not get improvement. The adenoid is abnormal and should be removed.

Dr. G. B. Jackson: There is little reason for an ectopic, threatening rupture to be overlooked. A diagnosis of ectopic, unruptured or otherwise should be immediately operated. In Dr. Abbott's case there is a possibility of a unilateral pregnancy. In pregnancy there is always a decidual change throughout the generative tract. Decidual tissue found is not an absolute sign of pregnancy. Must have fetal tissue. If chorionic tissue is present pregnancy is certain.

Dr. Abbott, closing: I wish to thank the discussants for their talks and criticism. Also I desire to call attention to the pathologists report which notes the findings of the fetus on one side and chorionic tissue on the other. I did not mean to say the diagnosis of ectopic pregnancy was easy. We must always be on the lookout in early stages of pregnancy for abnormalities.

Dr. Carmack, closing: There are two points to be emphasized: 1. There should be no tonsillectomies without definite indications. 2. In a case of obstruction or infection operate before endocarditis, nephritis and other similar conditions are defined.

Dr. T. C. Kennedy, closing: Roentgen ray is of great benefit in cancer cases. May well be combined with radium treatment. I have no objections to Dr. Noble's remarks. He has a right to his opinion, however, all the cases he sent me were ones which he had refused to operate on account of the impossibility of doing them any good. When such men as John Clark of Philadelphia, Kelly of Baltimore, Ransohoff of Cincinnati, Matof of New Orleans and the Mayos admit the value of radium there must be some good in it.

Meeting adjourned. Attendance 72.

L. H. MAXWELL, Secretary.

TIPPECANOE COUNTY

Regular meeting called to order at Hotel Lahr, LaFayette, November 16, by President Pyke. Minutes of last meeting read and allowed to stand without change. Following this the meeting for the time being was turned over to our honored guests, the State Board of Health with Dr. Kern acting as chairman.

Dr. Cowing was the first one introduced. He commented on his visit to our city and paid a high tribute to our hospitals and stated they were a fine compliment to the local profession which was a factor in establishing their efficiency. That the community had established high ideals but had some shortcomings as to health movements. That the doctors could and should offer friendly criticisms to the state board. That we should cooperate with each other and work together to secure favorable legislation. This evening's courtesy indicated we would cooperate.

Dr. Henshaw was next introduced as the dental member of the board. Stated that dental representation had recently been added to the board. He had been warmly welcomed upon the board. The Indiana Dental Society was well organized and this was chiefly through the efforts of Dr. Albert R. Ross of this city. That the late General Gorgas had sent by him (Henshaw) to Indiana the message, "That no one in the United States of America had done more for public health than Dr. J. N. Hurty."

Dr. Hurty was next called on. He said chiropractors had a large legislative fund to fight all medical, health and nursing acts. We must organize to combat these attacks. We are not fighting chiropractors as such but are contending that for the protection of the public they must come up to our standard instead of trying to pull us down to their low level.

At this point all members of the board of health but Dr. King left and President Pyke resumed the chair.

Dr. King talked on "Venereal Diseases" and "Control Ordinance." He said existing laws were amply sufficient if enforced, but local ordinance brought the matter to the attention of the public and thus was educational. Medical profession must give cooperation or no results could be obtained. The objection that "clinics" treated cases that were able to pay was admitted to be true in a measure; but that the education and the publicity brought ten cases to the physician to every one taken away. The "clinic" was a safeguard for public welfare. The public demands some action must be taken and the medical profession is expected to shoulder its share of the responsibility. The local board of health, the medical society and the public officials must formulate a plan to discriminate who are to be free patients and who are not. It has been well said, "To him who knows syphilis, all things medical will be given." Under existing conditions but 10 to 15 per cent. of venereal cases are reported. If you don't treat venereal cases turn them over to a competent person who does. LaFayette should have a venereal clinic for three reasons: 1. Because the source of many cases over the state has been traced here. 2. LaFayette is medically contiguous to a large territory. 3. The university with its 2,700 student boys places a responsibility on this city. The State Board of Health will do anything to establish a clinic. Will place a competent full time or part time man in charge, so, cooperate with the State Board of Health and the National Public Health Service and join the world wide movement.

Dr. Pyke: We must *push*, and not let politicians bluff us.

Dr. Shafer: Previous failure was because the city would not sponsor the expense. We must protect the University's 2,700 boys.

Professor Coulter: The drinking problem is practically gone now. No more than twenty-five cases in the past year among 2,700 students and these came from old habit cases. The venereal evil is alarming and we are held responsible. The venereal clinic is endorsed by all forward-looking communities. LaFayette should control its streets and its houses. Doctors and citizens must act; all fight as one unit and drive hard.

Dr. Beasley: How long would they stay cured? "A burnt child dreads fire"—until he reaches puberty.

Dr. King: The first draft of Indiana soldiers contained over 5 per cent. of acute venereal cases; later drafts were less. Indiana was rated as thirty-sixth state as to infection, i. e., thirty-five states were better than we. Of all men the country over, examined for service, 6 per cent. were infected. After every war there is an increase of venereal diseases. Twenty per cent. of professional confirmed prostitutes are feeble-minded.

The following motion was made by Dr. Keiper, properly seconded and unanimously carried: "It is the sense of the Tippecanoe County Medical Society that the State Board of Health and the United States Public Health Service put in a venereal clinic in LaFayette."

Dr. Ruschli suggested a get together meeting. To first have some one to feel out the public officials to ascertain if they would consider the question at all. If they were found to be in a receptive mood then to arrange, at the expense of this society, for a supper at which would be invited representatives of this society, the mayor, proprietors of the local newspapers, representatives of Purdue University and representatives of any other public welfare organizations that may suggest themselves. The president appointed as a committee to promulgate this scheme Drs. Ruschli and Keiper, giving them power to choose extra committeemen if needed and also giving them full power to act.

Members present 30. Visitors present 7.

W. M. RESER, M.D., Secretary.

THE TRUTH ABOUT MEDICINES

Since publication of New and Nonofficial Remedies, 1920, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

NEW AND NONOFFICIAL REMEDIES

BENZYL BENZOATE-VAN DYK.—A brand of benzyl benzoate (See New and Nonofficial Remedies, 1920, p. 49) complying with the N. N. R. standards. L. A. Van Dyk, New York, N. Y.

BENZYL BENZOATE-VAN DYK 20 per cent.—Each 100 Cc. contains benzyl benzoate-Van Dyk 20 Cc., and alcohol 80 Cc.

BENZYL BENZOATE-VAN DYK 20 per cent. AROMATIC.—Each 100 Cc. contains benzyl benzoate-Van Dyk, 20 Cc.; oil of orange, 0.74 Cc., and alcohol, 79.26 Cc.

BENZYL ALCOHOL-IPCO.—A brand of benzyl alcohol (See New and Nonofficial Remedies, 1920, p. 27), complying with the N. N. R. standards. Intra Products Co., Denver, Colo.

VEN STERILE SOLUTION BENZYL ALCOHOL 4 per cent. 2 Cc.—Each ampoule contains benzyl alcohol-Ipco 4 per cent. in physiological solution of sodium chloride, 2 Cc. Intra Products Co., Denver, Colo.

VARGOL.—A compound of silver and a derived albumin containing not less than 20 per cent. of silver. For the action and uses of Vargol, see general article on Silver Preparations under Silver Protein Preparations, Argyrol Type, New and Nonofficial Remedies, 1920, p. 310). Heyden Chemical Co., New York, N. Y. (*Jour. A. M. A.*, Nov. 27, 1920, p. 1499).

PROPAGANDA FOR REFORM

A COUNCIL ON PHARMACY AND CHEMISTRY FOR THE NETHERLANDS.—The minister of labor of the Netherlands officially inaugurated, on September 1, the government Instituut voor Pharmaco-Therapeutisch Onderzoek, which seems to be modeled after the Council on Pharmacy and Chemistry of the American Medical Association. The minister of labor remarked in his opening address that the Netherlands has had a permanent pharmacopeia commission since 1899. But this does not attempt to keep pace with the flood of new remedies, and the government has finally heeded the appeals of the Netherlands Medical Association and the Pharmaceutical Association and has founded this institute. The Council on Pharmacy and Chemistry of the Netherlands is to have the support and backing of the government; the Council on Pharmacy and Chemistry of the American Medical Association has only the backing of the medical profession (*Jour. A. M. A.*, Nov. 6, 1920, p. 1279).

MISBRANDED VENEREAL NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities on the ground that the therapeutic claims made for them were false and fraudulent; Musser's Capsules (Musser-Reese Chemical Co.), consisting essentially of copaiba balsam and oil of santal with indications of oil of cubebs and oil of mace. Dr. Sanger's Capsules (Edward J. Moore Sons, Inc.), consisting essentially of copaiba, cubebs, santal oil, matico, licorice root and magnesium oxid. Rid-It Caps (S. Pfeiffer Mfg. Co.), consisting essentially of salol, oils of juniper and sassafras, turpentine, a fixed oil and coloring matter. Black and White Capsules (Wilson Drug Co.), consisting of capsules containing hexamethylenamine and of capsules containing a mixture of volatile oils, including cubebs and copaiba. Benetol (Benetol Co.), consisting essentially (in agreement with a previously reported analysis by the A. M. A. Chemical Laboratory) of alphanaphthol, soap, glycerin, water and traces of essential oils and alcohol. G-U-C Capsules (Hollander-Koshland Co.), consisting of a sulphurated oil with volatile oils, including copaiba, cinnamon and santal oils. Merz Santal Compound (Merz Capsule Co.), consisting of balsam copaiba, cassia, sandal wood oil and a sulphurated oil. Enoob Antiseptic Injection and Capsules (Tropical Cooperative Co.), the "injection" being essentially a solution of phenol, menthol, thymol, boric acid and zinc sulphate in water, and the "capsules" consisting essentially of cubebs, copaiba, gum turpentine and pepsin with indications of santal oil. White Swan Injection (Stacy Chemical Co.), essentially a watery solution of boric acid, salts of aluminum, zinc and ammonium, glycerin and phenol with bismuth subgallate in suspension (*Jour. A. M. A.*, Nov. 6, 1920, p. 1285).

HELPING THE COUNCIL.—There are many physicians who, while figuratively patting the Council on Pharmacy and Chemistry on the back, do nothing to aid its efforts. On the other hand, there are men in the profession who give the Council active support. Such a man wrote to a pharmaceutical concern that he was receiving advertising concerning its products and suggested that until these products had been accepted by the Council, it was a waste of postage to send this. He explained that he depended entirely on the Council in such matters as these (*Jour. A. M. A.*, Nov. 6, 1920, p. 1275).

CHAULMOOGRA OIL.—Chaulmoogra Oil is obtained by expression from the seeds of an East Indian tree, *Taraktogenos kurzii*. Closely related oils are obtained from *Hydnocarpus wightiana* Blume, and *H. anthelmintica* Pierre. This class differs from other known

oils in being composed chiefly of the glycerol esters of two unsaturated fatty acids, named chaulmoogric acid and hynocarpic acid. In India, chaulmoogra oil has been used both orally and externally in the treatment of leprosy since prehistoric times. Tourtoulès used the oil subcutaneously in 1899. V. D. Heiser used the oil in 1914 for the treatment of leprosy by intramuscular injection. Leonard Rogers used orally a mixture of the fatty acids from the oil, which he called gynocardic acid, and later used the sodium salts of these acids subcutaneously (1916), and later on intravenously. Hollman and Dean employed the ethyl esters of the fatty acids from the oil in 1919 (*Jour. A. M. A.*, Nov. 13, 1920, p. 1361).

IRON, ARSENIC AND PHOSPHORUS COMPOUND.—The Council on Pharmacy and Chemistry reports that Hypodermic Solution No. 13 Iron, Arsenic and Phosphorus Compound (Burdick-Abel Laboratory) was found unacceptable for New and Nonofficial Remedies for the following reasons: 1. It does not contain ferrous citrate as claimed; instead, the iron is in the ferric condition, apparently in the form of the unofficial and unstandardized "iron citrate green" for which there is no evidence of superiority over the official iron and ammonium citrate. 2. Its name gives no information on the form in which the iron, the arsenic or the phosphorus occurs therein. The term "arsenic" does not indicate that the preparation contains the mild cacodylate. Nor does the term "phosphorus" tell that it contains the practically inert sodium glycerophosphate. 3. The preparation is unscientific because (a) it is irrational to prescribe iron and arsenic in fixed proportions; (b) there is no evidence that the hypodermic or intramuscular administration of iron has any advantage over its oral administration, and (c) glycerophosphates have not been shown to have properties other than inorganic phosphates, and hence the administration of sodium glycerophosphate as a hematinic is illogical (*Jour. A. M. A.*, Nov. 13, 1920, p. 1358).

PARATHESIN NOT ADMITTED TO N. N. R.—The Council on Pharmacy and Chemistry reports that the local anesthetic ethyl paraminobenzoate was first introduced as "Anesthesin" or "Anaesthesin"; that the product is not patented in the United States, and that it may be manufactured by any firm which chooses to do so. In order that a common name for the drug might be available, the Council coined the short, easily remembered and descriptive name "Benzocaine." As the term "Anesthesin" had become a common name for the drug, the Council also recognized this as a synonym for benzocaine. While the Council had previously recognized the brand of benzocaine manufactured by the H. A. Metz Laboratories, Inc., under the name "Anesthesin," this firm requested recognition of the product as "Parathesin." As the use of one substance under several names causes confusion and retards rational therapeutics, the Council's rules provide against the recognition of proprietary names for nonproprietary, established drugs. For this reason, and because the legitimate interests of the manufacturer may be safeguarded by appending his name or initials to the common name, benzocaine or anesthesin, the Council refused recognition to the designation "Parathesin" (*Jour. A. M. A.*, Nov. 13, 1920, p. 1358).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities: Dr. Clifton's Brazilian Herbs (Clifton Drug Co.), sold under therapeutic claims which were false and fraudulent. Her-Vo (Her-Vo Mfg. Co.), sold with therapeutic claims which were false and fraudulent. Acetylo-Salicylic Acid Tablets (James and Annis), containing acetanilid but no acetylsalicylic acid (*Jour. A. M. A.*, Nov. 13, 1920, p. 1359).

MORE TRUTH ABOUT SACCHARIN.—It has been asserted that ingestion of saccharin increases the catalase content of the blood; that catalase increases oxidation in the animal organism, and hence that the use of saccharin by diabetics might be of value. However, the alleged content of catalase remains improbable and unproved. Further, recent investigations show that administration of saccharin, even in huge amounts, does not increase oxidation in the animal body. Saccharin is neither a food nor a potent drug. Its usefulness in dietotherapy is limited to the function of taste (*Jour. A. M. A.*, Nov. 13, 1920, p. 1347).

VACCINES FOR COMMON COLDS.—There is no scientific evidence that common colds can be prevented by the use of vaccines, despite the glowing recommendations of vaccine makers and the patter of the detail man. Colds characterized by catarrhal inflammation of the mucous membranes of the nose and the throat are caused by various organisms. The organism concerned in one epidemic is different from that in another. It is impossible to anticipate what organism is about to invade the household or community. Inoculation of mixed vaccines fails to produce immunity (*Jour. A. M. A.*, Nov. 13, 1920, p. 1361).

"LEPSO"-EPILEPSY CURE.—Like most epilepsy "cures," Lepso was found by the A. M. A. Chemical Laboratory to be essentially a bromid mixture. It was found to contain the equivalent of 51 grains of potassium bromid to the dose (*Jour. A. M. A.*, Nov. 20, 1920, p. 1443).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities in charge of the enforcement of the Food and Drugs Act: Stearns' Santolods (Frederick Stearns and Co.), misbranded in that the therapeutic claims were held to be false and fraudulent. Milks' Emulsion (Milks Emulsion Co.), misbranded in that it was falsely claimed to be of benefit in incipient consumption, bronchial asthma, pneumonia, etc. Bliss Native Herbs (Alonzo O. Bliss), misbranded in that the therapeutic claims were held to be false and fraudulent. Madame Dean Antiseptic Vaginal Suppositories (Martin Rudy), misbranded in that the therapeutic claims were held to be false and fraudulent. Halz Tablets (Ed. Price Chemical Co.), misbranded in that the curative claims were held to be false and fraudulent. D. D. D. Ordinary and D. D. D. Extra Strong (D. D. D. Co.), misbranded in that the curative claims were held unwarranted (*Jour. A. M. A.*, Nov. 20, 1920, p. 1442).

CHLORLYPTUS NOT ACCEPTED FOR N. N. R.—Chlorlyptus (Weeks Chemical Co.) is a chlorinated eucalyptus oil containing 30 per cent. chlorine in relatively stable combination. It is claimed to be a new "chlorinated antiseptic," highly efficient as a wound antiseptic. It is proposed for use in local infections, burns and as an antiseptic in the alimentary and urinary tract. The laboratory investigation made in the A. M. A. Chemical Laboratory and by the referee of the Council on Pharmacy and Chemistry who was in charge of the product showed that Chlorlyptus is a feeble antiseptic, considerably weaker than eucalyptus oil. The chlorine contained in it is bound too firmly to have any action; in fact, the chlorination has merely weakened the eucalyptus oil. The clinical evidence submitted by the manufacturer did not demonstrate the value of Chlorlyptus. The Council on Pharmacy and Chemistry voted not to accept Chlorlyptus for New and Nonofficial Remedies because of the unfavorable results of the laboratory investigations, but with the agreement that the product will receive further consideration if more convincing clinical data become available (*Jour. A. M. A.*, Nov. 27, 1920, p. 1512).

INDEX TO VOLUME XIII

ORIGINAL ARTICLES

A

PAGE

Adenoidectomy and Tonsillectomy, Local Indications for	376
Appendicitis, Acute	235
ASBURY, W. D., Terre Haute (Mediastinal Tumor)	398
Asset and Liability, Legacies of.....	371
Asthenia, Neurocirculatory	169

B

BAKER, WALTER H., South Bend (A Few Observations Concerning Chronic Uterine Infections)	166
BARNES, A. R., Indianapolis (Twilight Sleep. A Report of Thirty Cases and a Summary of 5,575 Cases Reported in the Literature).....	259
Bone Graft, Autogenous	238
BONN, H. K., Indianapolis (Hour-Glass Bladder, with Report of an Operated Case).....	107

C

Calcaneus, Fracture of the.....	200
CARMACK, JOHN WALTER, Indianapolis (Mastoiditis at Camp Taylor).....	52
(Local Indications for Tonsillectomy and Adenoidectomy)	376
Catharsis, The Abuse of, in Infants and Children	343
Child Hygiene and the Doctor.....	73
Child Hygiene, The Relation of Ophthalmology to	77
Child Hygiene, The Relation of Otolaryngology to	79
Colon, Transverse, An Unusual Case of Temporary Incarceration of, Within Bilateral Hernial Sacs	227
CREGOR, F. W., Indianapolis (The Treatment of Syphilis as Practiced in the United States Public Health Service Clinics in Indiana).....	266
CURTNER, MYRON L., Vincennes (Transverse Incision in Pelvis Operations).....	237

E

EASTMAN, J. R., Indianapolis (Silver Wire in Vesicovaginal Fistula)	393
EDWARDS, SCOTT R., Indianapolis (The Effect of Postoperative Rest on Coordination in Potential Tabetics)	271
EISENSTAEDT, J. S., Chicago (The Mechanical Aids in Diagnosis of Lesions of the Upper Urinary Tract)	197
EMERSON, CHARLES P., Indianapolis (Clinical Manifestations and Sequelae in Influenza)...	155
Empyema, The Surgical Treatment of, by a Closed Method	46
Encephalitis, Epidemic, in Northern Indiana. A Suggestion for a Rational Plan of Treatment.	228

F

Fistula, Vesicovaginal, Silver Wire in.....	393
Fractures of the Pelvis	8

H

HAMER, H. G., AND WISHARD, W. N., Indianapolis (Résumé of Past Two Years' Prostatic Work)	111
HAYWOOD, CHARLES, Elkhart (Some Fractures of the Pelvis)	8

PAGE

Hinkle Tablets, Probable Strychnia Poisoning from. Case Report	375
HITCHENS, A. PARKER, Indianapolis (Lipovaccines)	41
HOFFMAN, R. V., South Bend (Epidemic Encephalitis in Northern Indiana)	228
HOOVER, E. M., Elkhart (Sir William Osler. An Estimation of His Life).....	191
Hour-Glass Bladder, with Report of an Operated Case	107
HUMES, C. D., Indianapolis (Meningitis—Neurologic Manifestations)	85

I

Influenza, Clinical Manifestations and Sequelae in.	155
Influenza, Epidemic, Morbid Anatomy and Bacteriologic Findings in (Epidemic of Autumn, 1918; Camp Zachary Taylor).....	157
Influenza in Children	153

K

Kidney Function, Testing	120
KIME, E. N., Indianapolis (Morbid Anatomy and Bacteriologic Findings in Epidemic Influenza)	157

L

LAYMAN, DANIEL W., Indianapolis (The Relation of Otolaryngology to Child Hygiene).....	79
Liability and Asset, Legacies of.....	371
Lipovaccines	41
Lung, Darning Needle in the—Case Report.....	200

M

Mastoiditis at Camp Taylor.....	52
MCCASKEY, G. W., Fort Wayne (The Value of the Roentgen Ray in the Diagnostic Work of the Internist—Illustrated)	1
MCCOWN, P. E., Indianapolis (Renal Tuberculosis)	114
MCCULLY, CHARLES H., Logansport (Legacies of Asset and Liability)	371
Mediastinal Tumor	398
MELTON, O. O., Hammond (Conservative Surgery)	14
Meningitis—Neurologic Manifestations	85
MILLER, MILO K., South Bend (The Abuse of Catharsis in Infants and Children).....	343
MOZINGO, ARVINE E., Indianapolis (The Surgical Treatment of Empyema by a Closed Method.	46
MUMFORD, E. B., Indianapolis (Fracture of the Calcaneus)	200

N

NEWCOMB, JOHN RAY, Indianapolis (The Relation of Ophthalmology to Child Hygiene).....	77
---	----

O

Osler, Sir William. An Estimation of His Life..	191
OTTINGER, R. C., Indianapolis (Acute Appendicitis)	235

P	PAGE	PAGE	
PADGETT, E. E., Indianapolis (The Relative Merits of Surgery, Radium and Roentgen-Ray in Treatment of Uterine Fibroids).....	12	Uterine Fibroids, The Relative Merits of Surgery, Radium and Roentgen Ray Treatment of.....	12
Pelvic Operations, Transverse Incision in.....	337	Uterine Infections, Chronic, A Few Observations Concerning	166
Pelvis, Some Fractures of the.....	8		
Physician, The—		V	
(I) A Doctor of the Old School.....	151	Vesicovaginal Fistula, Silver Wire in.....	393
(II) A Gentleman of Culture and Character..	195		
(III) The Training of an Intern.....	232	W	
(IV) His Recreation and Vacations.....	263	WINKLEPLECK, A. M., Elnora (Probable Strychnia Poisoning from Hinkle Tablets. Case Report)	375
(V) The Young Doctor	298	WISHARD, W. N., AND HAMER, H. G., Indianapolis (Résumé of Past Two Years' Prostatic Work)	111
(VI) Triumphs and Dangers of Specialism..	338	WYNN, FRANK B., Indianapolis (The Physician: A Doctor of the Old School).....	151
(VII) The General Practitioner.....	365	(The Physician: A Gentleman of Culture and Character)	195
(VIII) Obligations to Reading and Study.....	400	(The Physician: The Training of an Intern)..	232
POWELL, NETTIE B., Marion (Influenza in Children)	153	(The Physician: His Recreation and Vacations).....	263
PORTER, MILES F., JR., Fort Wayne (Neurocirculatory Asthenia)	169	(The Physician: The Young Doctor).....	298
(Hyperactivity of the Thyroid).....	295	(The Physician: The Triumphs and Dangers of Specialism)	338
Prostatic Work, Past Two Years', Résumé of..	111	(The Physician: The General Practitioner)....	365
		(The Physician: Obligations to Reading and Study)	400
R		Y	
Radium, Roentgen Ray and Surgery, Relative Merits of, in the Treatment of Uterine Fibroids	12	YODER, A. C., Goshen (Testing Kidney Function). 120	
RAWLES, LYMAN T., Fort Wayne (The Autogenous Bone Graft)	238		
Renal Tuberculosis	114	EDITORIALS	
Roentgen-Ray, Radium and Surgery, Relative Merits of, in the Treatment of Uterine Fibroids	12	Advertising and Its Returns.....	25
Roentgen-Ray, The Value of, in the Diagnostic Work of the Internist—Illustrated.....	1	Advertising, Chiropractic	406
ROYER, DON J., Fort Wayne (An Unusual Case of Temporary Incarceration of Transverse Colon Within Bilateral Hernial Sacs).....	227	Anesthetists, Lay	205
		Appendicitis, Chronic	327
S		Chiropractic Advertising	406
SCHWEITZER, ADA E., Indianapolis (Child Hygiene and the Doctor)	73	Chiropractic Legislation	405
Strychnia Poisoning, Probable, from Hinkle Tablets	375	Chiropractors, Fraudulent Advertising of.....	55
STUDY, J. N., Cambridge City (Darning Needle in the Lung. Case Report).....	200	Christian Scientists' Attitude on Medical and Public Health Legislation	242
Surgery, Conservative	14	Church, The Doctor's Relation to the.....	91
Surgery, Radium and Roentgen Ray, The Relative Merits of, in the Treatment of Uterine Fibroids	12	Compulsory Health Insurance	90, 172, 274
Syphilis, The Treatment of, as Practiced in the United States Public Health Service Clinics of Indiana	266	Contract Workers, Small Salaries of.....	379
		Diagnostic Discrimination	174
T		Diphtheria, The Treatment of.....	135
Tabetics, Potential, The Effect of Postoperative Rest on Coordination in.....	271	Dues, Medical Society, Objection to.....	328
Thyroid, Hyperactivity of the.....	295	Election Results from the Medical Standpoint....	379
Tonsillectomy and Adenoidectomy, Local Indications for	376	Fees in Industrial Cases.....	328
Tuberculosis, Renal	114	Group Medicine	174
Tumor, Mediastinal	398	Hospital Movement, The Better.....	242
Twilight Sleep. A Report of Thirty Cases and a Summary of 5,575 Cases Reported in the Literature	259	Hospital Service, Improvement in.....	204
		Income Tax, The Professional Man's.....	36
U		Increased Cost of Maintaining Medical Societies. 405	
Urinary Tract, Upper, The Mechanical Aids in Diagnosis of Lesions of the.....	197	Indiana, Public Health in.....	23
		Indiana Doctors in the Late War, Record of.....	24
		Indiana University, Centennial Celebration.....	206
		Indiana University School of Medicine, Postgraduate Study in	174
		Industrial Cases, Fees In.....	328
		Legislation, Chiropractic	405
		Legislation, Medical and Public Health, Christian Scientists' Attitude on	242
		Legislative Candidates, Interview Your	37
		Leprosy, An Apparent Cure for.....	274
		Medical Law Enforcement	241
		Medical Laws, Violation of the.....	23

	PAGE
Medical Organization for Economic Purposes..	348
Medical Profession, Should the, Organize or Be Bolshevized?	346
Medical Profession, Socializing the.....	203
Medical Societies, Increased Cost of Maintaining.	405
Noguchi's Discoveries in Yellow Fever.....	137
Officers, Ex-Medical, Attention.....	136
Osler, Sir William, Death of.....	24
Pathogenesis, Unnecessary Failures in.....	173
Physical Therapy	349
Postgraduate Study in Indiana University School of Medicine	174
President, Our	327
Public Health in Indiana.....	23
Pulmonary Infections Following Operations on Nose and Throat	273
Sanitation and Good Work.....	275
Self-Drugging and Its Cause.....	206
Squint in Young Children, Management of.....	378
Wassermann Reactions, Variations in.....	241
War, the Late, Record of Indiana Doctors in....	24
Yellow Fever, Noguchi's Discoveries in.....	137

DEATHS

Addleman, Claude H.....	246
Adelotte, Thomas	332
Barnum, Charles E.....	246
Barnett, Warrick	98
Bartlett, Claudis G.....	63
Bartlett, Samuel M.....	410
Bass, Thomas R.....	98
Beaver, Thurman Ross	97
Blacker, Charles E	140
Bland, John A.....	332
Bowers, Valentine	140
Breaks, Luther Zwingli	279
Christie, Mrs. Agnes	331
Clark, John William	140
Clauser, Marjorie	97
Cline, George F.....	246
Clover, John F.....	29
Cox, Lunsford Eliza	211
Devaney, Mitchell O.....	29
Dillon, Jephtha	98
Donaldson, T. G.....	28
Dukate, John S.....	410
Eberhard, Eli L.....	181
Emenhiser, Lewis Calvin	63
Finley, John F.....	28
Foster, Robert	29
Fulton, George E.....	181
Fulton, John Calvin	246
Gard, Mrs. India M.....	410
Garr, Jesse D.....	181
Garrett, Obediah H.....	354
Gaylord, Margaret W.....	97
Gerrish, M. D.....	29
Giffin, Robert T.....	140
Green, G. F.....	63
Hanna, William P.....	28
Hartley, America Katherine	97
Hastings, Aaron H.....	354
Helfrish, Harry J.....	354
Helm, Charles J.....	211
Helming, T. W.....	181
Hershey, Frank C.....	98
Hill, Mrs. Harriet Corey	210
Hill, Henry B.....	211
Hollis, Samuel	140

Hornocker, Simon D.....	140
Hoskins, George H.....	411
Hurst, Stephen H.....	63
Johnston, Mrs. Mary A.....	140
Kahn, Mrs. Helen E.....	140
Keiper, Mrs. Mary Lloyd	140
Kelley, Donald M.....	181
Kittinger, Anna Wilson	279
Knapp, Victor	63
Knerr, Leonora E.....	29
Kreider, Salona	279
Lewis, Samuel B.....	332
Littler, John M.....	63
Lockridge, Arthur B.....	332
Loder, Frank C.....	29
Loehr, E. C.....	181
Logan, O. T.....	29
Long, Harry Huston	355
Loomis, John	28
Machette, A. C.....	140
Mackey, R. C.....	29
Maddox, L. E.....	63
McCain, Richard C.....	410
McClain, Levi M.....	382
McKay, John B.....	98
McLin, George H.....	354
Merry, John W.....	63
Mitchell, C. F.....	382
Morris, Charles C.....	410
Moore, Mrs. Catherine R.....	331
Newby, John C.....	381
Norvell, Horace V.....	331
Proctor, Jeremiah A.....	181
Reasoner, Mrs. Luella Wood.....	181
Reynard, Granville	410
Schmauss, Leonard F.....	98
Schneck, Luella M.....	63
Sherwood, Benjamin M.....	331
Short, William H.....	382
Sigler, George Augustus	63
Simpson, Wade E.....	211
Sipe, John A.....	355
Snall, Mrs. Emma A.....	211
Sourwine, John D.....	246
Stanley, Logan	410
Stewart, Frank C.....	29
Stewart, James C.....	246
Stuckmeyer, William E.....	332
Stutsman, William Harold	381
Swain, Rachel	29
Swartz, Albert Dell	211
Taggart, John F.....	29
Theorell, John J.....	140
Todd, Mrs. Susan G.....	140
Trueblood, Jesse C.....	181
Van Sant, William P.....	28

SOCIETY PROCEEDINGS

Council, The	69
Decatur County	189
Floyd County	38
Fountain-Warren	190
Hamilton County	38
Hendricks County	387
Indiana State Medical Association.....	36,
.....253, 283, 305,	358
Indianapolis Medical Society.....	37, 68, 144, 187,
.....217, 289,	414
Jasper-Newton County	38

	PAGE
Johnson County	39, 224
Lake County	39, 149
Miami County	70
Montgomery County	39, 224, 292
Shelby County	71
Sullivan County	71
Thirteenth District	149, 189
Tippecanoe County	149, 254, 387, 418
Wells County	71

BOOK REVIEWS

Bacteria and Protozoa, Pathogenic, Textbook Upon the (McFarland)	392
Cerebrospinal Fluid in Health and Disease (Levinson)	40, xviii
Chemistry, Blood and Urine, The Newer Methods of (Gradwohl)	420, xviii
Children, Diseases of (Morse)	392, xviii
Cystoscopy and Urethroscopy, A Treatise on (Luys)	294, xviii
Diagnosis of Disease, Symptoms in the (Hare) ..	364
Dictionary, Medical, American Illustrated (Dor- land)	106
Duodenal Tube and Its Possibilities (Einhorn)	392, xviii
Genito-Urinary Surgery, An Outline of (Smith) ..	256
Geriatrics. A Treatise on Senile Diseases, Dis- eases of Advanced Life and Care of the Aged (Thewlis)	40, xviii
Health Officer, The (Overton)	106, xviii
Micro-Organisms, Pathogenic (Park)	294
Mustard Gas Poisoning, Medical Aspect of (War- thin and Weller)	391
Nervous and Mental Diseases (Church and Peter- son)	392
Nervous System, Diseases of the (Jelliffe)	294
Nursing Procedure, Pope's Manual of (Pope)	294

	PAGE
Obstetrics, Manual of (Davis)	392, xviii
Obstetrics, Manual of (Hirst)	420, xviii
Parasitology, Human (Rivas)	392
Pathology, General and Dental, with Special Ref- erence to Etiology and Pathologic Anatomy (Endelman and Wagner)	391
Protozoa and Bacteria, Pathogenic, A Textbook Upon the (McFarland)	392
Psychiatry, The Don Quixote of (Robinson)	106
Rectum, Handbook of Diseases of the (Hirsch- man)	392
Roentgen Interpretation. A Manual for Students and Practitioners (Holmes)	106
Roentgenotherapy (Tyler)	106, xviii
Sanitation for Public Health Nurses (Hill) ..	336, xviii
Surgery, Modern: General and Operative (DaCosta)	106
Surgical Patients, The After-Treatment of (Bart- lett)	150, xviii
Syphilis: A Treatise in Etiology, Pathology, Diag- nosis, Prognosis, Prophylaxis and Treatment (Hazen)	336
Urethroscopy and Cystoscopy. A Treatise on (Luys)	294, xviii
Urology in Men, Women, and Children, A Text- book of. Including Urinary and Sexual In- fections, Urethroscopy and Cystoscopy (Pedersen)	256
Urology, Diseases of the Urinary Organs; Dis- eases of the Male Genital Organs; The Vene- real Diseases (Keyes)	236
Venereal Diseases. The Practitioner's Manual of, with Modern Methods of Diagnosis and Treatment (Magian)	336, xviii
Women, Diseases of. Including Abnormalities of Pregnancy, Labor and Puerperium (Green) ..	392
X-Ray Plates and Films. The Systematic Develop- ment of (Wendell)	336, xviii



HARVESTING DIGITALIS ON THE MULFORD DRUG FARMS, GLENOLDEN, PENNA.

DIGITOL

(WORD-MARK)

Digitol is a dependable and uniform Tincture of Digitalis—**U. S. P. Strength**—from which the vegetable fats have been extracted.

It is adjusted to a definite standard by a series of chemical and physiological assays.

Comparative tests by the U. S. Bureau of Hygiene (Bulletin 48, December, 1908) and the American Medical Association (A.M.A. Journal, September 13, 1913), have proved the activity, uniformity and superiority of Mulford Digitalis.

Digitol is produced from the leaves of Digitalis plants grown on the Mulford drug farms, and every step, from the selection of the seed to the finished product, is under scientific control.

It is furnished in one-ounce vials only, to insure against deterioration.



H. K. MULFORD COMPANY, Philadelphia, U. S. A.

47119—M

Mulford

THE PIONEER BIOLOGICAL LABORATORIES

Adrenalin in Medicine

3—Treatment of Shock and Collapse

THE therapeutic importance of Adrenalin in shock and collapse is suggested by their most obvious and constant phenomenon—a loss in blood pressure.

The cause and essential nature of shock and collapse have not been satisfactorily explained by any of the theories that have been advanced, but all observers are agreed that the most striking characteristic of these conditions is that the peripheral arteries and capillaries are depleted of blood and that the veins, especially those of the splanchnic region, are congested. All the other symptoms—the cardiac, respiratory and nervous manifestations—are secondary to this rude impairment of the circulation.

The term collapse usually designates a profound degree of shock induced by functional inhibition or depression of the vasomotor center resulting from some cause other than physical injury, such as cardiac or respiratory failure.

Treatment aims to raise the blood pressure by increasing peripheral resistance. As a rapidly acting medical agent for the certain accomplishment of this object Adrenalin is without a peer. In cases of ordinary shock it is best administered by intravenous infusion of high dilutions in saline

solution. Five drops of the 1:1000 Adrenalin Chloride Solution to an ounce of normal salt solution dilutes the Adrenalin to approximately 1:100,000, which is the proper strength to employ intravenously. A slow, steady and continuous stream should be maintained by feeding the solution from a buret to which is attached a stop-cock for the regulation of the rate of flow.

In those cases marked by extremely profound and dangerous shock or collapse the intravenous method may prove too slow or ineffective. Recourse should then be had to the procedure described by Crile and called centripetal arterial transfusion. Briefly it consists in the insertion into an artery of a cannula directed *toward* the heart. Into the rubber tubing which is attached to the cannula 15 to 30 minims of Adrenalin 1:1000 is injected as soon as the saline infusion begins.

The effect of this is to bring the Adrenalin immediately into contact with the larger arteries and the heart. Sometimes, even in apparent death, the heart will resume its contractions, thereby distributing the Adrenalin through the arterial system and accomplishing the object of this heroic measure—resuscitation and elevation of the blood pressure.



PARKE, DAVIS & COMPANY



